ASSESSMENT ONQUALITYOF LIFE

AMONG OBESE CHILDREN

.

DISSERTATION SUBMITTED TO

THE TAMILNADU Dr. M. G. R. MEDICAL UNIVERSITY, CHENNAI

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE

DEGREE OF MASTER OF SCIENCE IN NURSING

CHILD HEALTH NURSING

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CERTIFICATE

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(ANTO LINCY .S)

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ABSTRACT

A descriptive study was to assess the quality of life among obese childrenin selected schools at Kanyakumari district.A descriptive design was adopted to assess the Quality of Life among obese children 33 samples were selected fromL.M.S Higher Second school Neyyoor and St. Joseph's Higher Secondary School, Thirithuvapuram to assess the Quality Of Life among obese children. Purposive sampling technique was used to select the sample.

The prevalence ofobesity among children .Samples were collected from L.M.S Higher secondary school and St. Joseph's Higher Secondary School Thirithuvapuram. The total Number of student in L.M.S Higher Secondary School were 154.Out of 154 20 (12.98%) children were found obese .In St. Joseph's Higher Secondary School total Number of student 128. Out of 128 children 13 (10.15%) were found as obese .The prevalence of obesity among children was 12.17%.All the obese children 33(11.70%) were selected for the study as a sample.

Represents Quality Of Life among obese children in this 5(15.15%) were Moderately satisfied , 20(60%) were slightly dissatisfied 7(22%,) were moderately dissatisfied . 1(3.03%) very dissatisfied. Represents Quality Of Life among obese children on health aspect, no one were very satisfied , 2(6.06%) Were moderately satisfied, 18 (54.54%) Were slightly dissatisfied, 9 (27.27%) Were moderately dissatisfied. 4(12.12%) Were dissatisfied. Represents Quality Of Life among obese children on family relationship 10(30%) were moderately satisfied, 16 (48.48%) Were slightly dissatisfied, 7(21.22%) Were moderately dissatisfied. Represents Quality Of Life among obese children on psycho social aspect, 6(18.18%) were Moderately satisfied , 17(51.51%) were slightly dissatisfied 9(27.27%,) were moderately dissatisfied . 1(3.03%) were Satisfied.

The quality of life among obese childrenwas dietary pattern was the calculated value of grater then table value which indicator there is a significant association between quality of life among obese children with the selected demographic variables such as standard of education, sex, educational status of father, occupation of father, educational status of mother, family income per month, type of family, area of residence, pocket money per month, religion, likeness junk food,Place of taking ,time take junk food, Dietary pattern and medical illness. Hence hypothesis (H1) is accepted

As per the study the researcher conclude that there was association between obese children and the quality of life.

CHAPTERI
INTRODUCTION

Childhood obesity is a condition where excess body fat negatively affects a child's health or well-being. As methods to determine body fat directly are difficult, the diagnosis of obesity is often based on BMI. Due to the rising prevalence of obesity in children and its many adverse health effects it is being recognized as a serious public health concern. Overweight children are also more likely to grow up to be overweight adults. Obesity during adolescence has been found to increase mortality rates during adulthood.

Obese children often suffer from teasing by their peers. Some are harassed or discriminated against by their own family. Obese children have carotid arteries which have prematurely aged by as much as thirty years as well as abnormal levels of cholesterol. Thus, they are more at risk for adult health problems such as heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis.

Childhood obesity can be brought on by a range of factors which often act in combination“Obesogenic environment” .The greatest risk factor for child obesity is the obesity of both parents. This may be reflected by the family's environment and genetics. Other reasons may also be due to psychological factors and the child's body type.

Schools play a large role in preventing childhood obesity by providing a safe and supporting environment with policies and practices that support healthy behaviors. At home, parents can help prevent their children from becoming overweight by changing the way the family eats and exercises together. The best way children learn is by example, so parents need to lead by example by living a healthy lifestyle. Overweight and obesity are largely preventable. Supportive policies, environments, schools and communities are fundamental in shaping parents’ and children’s choices, making the healthier choice of foods and regular physical activity the easiest choice (accessible, available and affordable), and therefore preventing obesity

Although there are some genetic or hormonal causes of childhood obesity, in most cases excess weight is due to overeating and under-exercising. Children require extra calories to fuel their growth and development; if they taken in the appropriate amount of calories, they should add pounds in proportion to their growth. But if they consume more calories than they're burning off, the result will be unnecessary weight gain. Childhood obesity is almost always a result of a number of factors working together to increase risk.

Unhealthy lunch options and regular consumption of high-calorie foods, like fast food, cookies and other baked goods, soda, candy, chips and vending machine snacks contribute to weight gain. Snacking is another major culprit. New research shows that American children are snacking more than ever before sometimes almost continuously throughout the day -- accounting for up to 27% of their daily calorie intake. Between 1977 and 2006, children increased their calorie intake from snacks by an average of 168 calories/day, up to a total of 586 calories. The largest increase was found in children aged 2 to 6, who consumed an extra 181 snack calories per day compared to two decades earlier.

Every aspect of environment in which children are conceived, born and raised can contribute to their risk of becoming overweight or obese. During pregnancy, gestational diabetes (a form of diabetes occurring during pregnancy) may result in increased birth weight and risk of obesity later in life. Choosing healthy foods for infants and young children is critical because food preferences are established in early life. Feeding infants energy-dense, high-fat, high-sugar and high-salt foods is a key contributor to childhood obesity. Lack of information about sound approaches to nutrition and poor availability and affordability of healthy foods contribute to the problem. The aggressive marketing of energy-dense foods and beverages to children and families further exacerbate it. In some societies, longstanding cultural norms (such as the widespread belief that a fat baby is a healthy baby) may encourage families to over-feed their children.

BACKGROUND OF THE STUDY

The term overweight rather than obese is often used in children as it is less stigmatizing. Obese children often suffer from teasing by their peers. Some are harassed or discriminated against by their own family. Stereotypes abound and may lead to low self-esteem and depression. According to an article(The New York Times) all of these health effects are contributing to a shorter lifespan of five years for these obese children. It is the first time in two centuries that the current generation of children in America may have a shorter life span than their parents. The greatest risk factor for child obesity is the obesity of both parents. This may be reflected by the family's environment and genetics. Other reasons may also be due to psychological factors and the child's body type

According to the **Journal of American Medical Association (JAMA)** (2015)According was Reported Approximately 17 percent of children and teenagers (ages 2 to 19) were obese from 2011 to 2012, and 31.8 percent were either overweight or obese. More than one-in-12 children (8.4 percent) are obese in early childhood (2- to 5-year-olds).By ages 12 to 19, 20.5 percent of children and adolescents were obese. More than 2 percent of young children were severely obese, 5 percent of 6-to-11-year-olds were severely obese and 6.5 percent of 12- to 19-year olds were severely obese.

According to the **World Health Organization (WHO) (2015)**Report that obese is a The problem is global and is steadily affecting many low- and middle-income countries, particularly in urban settings. The prevalence has increased at an alarming rate. Globally, in 2013 the number of overweight children under the age of five, is estimated to be over 42 million. Close to 31 million of these are living in developing countries.Overweight and obese children are likely to stay obese into adulthood and more likely to develop noncommunicable diseases like diabetes and cardiovascular diseases at a younger age. Overweight and obesity, as well as their related diseases, are largely preventable. Prevention of childhood obesity therefore needs high priority.

According to the report by the **National nutrionMonitoNiehues (2011)**In Puducherry and Karaikal regions surrounded by TamilNadu, the prevalence of

overweight and obesity ranged from 2.87% to 3.91% and 1.78% to 2.59%, respectively. carried out in urban school of Chennai,Tamil Nadu, reported a high prevalence of overweight (8.0-10.81%) and obesity (5.26-9.52%). Kerala the highest prevalence of overweight [8.66%] and obesity [4.69%]. A similar finding was reported from another study in Kerala that showed an increased prevalence of overweight and obesity from 4.94% and 1.26% in 2003 to 6.57% and 1.89% in 2005 with particular rise in the age group 5-11 yrs. Yanam surrounded by Andhra Pradesh had 2nd highest prevalence of overweight [5.68%], and lowest prevalence of obesity [0.57%]. Adolescents in Hyderabad reported prevalence of overweight of 7.2% (95%). By and large each region from the Union Territory of Puducherry showed trends similar to the respective surrounding states indicating a strong influence of local environmental and sociocultural factors on the pattern of overweight and obesity found in these children.

SIGNIFICANCE AND NEEDFOR THE STUDY

The vast majority is overweight or obese children live in developing countries, where the rate of increase has been more than 30% higher than that of developed countries.If current trends continue the number of overweight or obese infants and young children globally will increase to 70 million by 2025. Without intervention, obese infants and young children will likely continue to be obese during childhood, adolescence and adulthood.Obesity in childhood is associated with a wide range of serious health complications and an increased risk of premature onset of illnesses, including diabetes and heart disease.Exclusive breastfeeding from birth to 6 months of age is an important way to help prevent infants from becoming overweight or obese.Indian/Native Alaskan low-income preschool children (ages 2 to 4) have the highest obesity rates at 21.1 percent

Rolland-Cachera (2010) suggests that in addition to identification of a child's current BMI, the use of a predictive BMI curve to identify the development of obesity even when this is not clinically visible may be helpful to allow early intervention in children who are at risk of becoming obese. Nonetheless suggest that using the BMI as the sole indicator of childhood obesity should be done with caution because it may not accurately identify all obese children.

Karasalihoglu et al.(2010) highlight ethnic differences among BMI and suggest that each country should produce its own BMI percentiles to take these into accont. This is likely to be more problematic in countries where the population is relatively homogenous.

Ruxton (2011)defines obesity an excess of body fat, with overweight being seen as a less severe excess of body fat than obesity. Although overweight might logically be thought to refer simply to body weight, weight alone is not considered an accurate measure of whether a problem exists. There are a variety of techniques that can be used to assess the volume of body fat with considerable accuracy. These include underwater weighing (densitometry),multifrequency bioelectrical impedance analysis (BIA) and magnetic resonance imaging(MRI) . Despite their accuracy, such methods are not appropriate or useful in most clinical situations, and would not be considered practical or desirable as screening tools. In day to-day paediatric surveillance, the important factors in the tools used to assess whether a child is overweight or obese are ease sofa use, lack of invasiveness and accuracy of measurement. Easy to obtain measures include weight and height (from which the body mass index [BMI] using weight [Kg] divided by height (M^2 can be assessed) , waist circumference and skin fold thickness . These methods are less exact , but they are practical and generally considered sufficiently reliable, particularly when used in considered sufficiently considered sufficiently reliable, particularly when used in conjunction with one another, to eatable identification of risk.

CharooBet al (2010) conducted a study to assess the prevalence of obesity among school children . obesity is increasing at an alarming rate throughout the world. Today it is estimated that there are more then 300million obese people world wide . Breast feeding is protective against obesity .adults children are to be watched for gain in height rather than reduction of less then 10% is a normal variation, not significant in obesity . eighty percent over weight 10-14 year old adolescents are at risk of becoming overweight adults compared to 25% of overweight preschool children (<5 years old) and 50% of 6-9 year old overweight children . obesity in childhood

and adolescence has been related to an increase in mortality in adulthood on follow up.

When the researcher went for school health programmer researcher found their many children affected with obese children. So the researcher interested and identified the children with obese children assess the quality of life.

STATEMENT OF THE PROBLEM

A descriptive study to assess the quality of life among obese children in Selected schools at Kanyakumari district.

OBJECTIVES OF THE STUDY

- To assess theprevalence ofobesityamongchildren.
- To assess the quality of life of obese children
- To associate the quality of life of obese children with selected demographic variables

RESEARCH HYPOTHSIS

H_1 -There is a significant association between the quality of life of obese children with selected demographic variables.

OPERATIONAL DEFINITION

Assess

It refers to calculation of the Body Mass Index by using World Health Organization quatelet scale

Quality of life

It refers feeling of happiness and comfort experienced by the obese children which is assessed by the World Health Organization Quality Of Lifeassessment tool.

Obesechildren

Children those who are studying 6th to 9th standard and whose Body Mass Index is greater than 30 were considered as obese children.

ASSUMPTION:

This study assumesthat ;

- Obesity may be prevalent among school children
- Quality Of Life may be enhanced if the obese children made aware of their problems of obesity .

DLIMITATIONS:

This study wasdelimited to;

- Obese children Studying 6thto 9th standard
- Quality of Life was assessed only for the obese children.
- 33 Samples were selected.
- Onlyfour weeks for data collection.

PROJECTED OUTCOME:

The findings of the study will help to identify the quality of life among obese children. At the end of the study obese children can understand the importance of quality of life and try to live in the society without any problems.

CONCEPTUAL FRAMEWORK

ROSENSTOCK'S AND BECKER'S HEALTH BELIEF MODEL(1950)

The conceptual framework used for this study was**Rosenstock's and becker's Health belief model(1950)**

The Conceptual framework consist of three concepts of

1. Individual perceptions
2. Modifying factors and
3. Likelihood of action

Individual perceptions

Individual perceptions may be perceived susceptibility, perceived seriousness and perceived threat to the disease . In this model individual perception is child with obesity.

Modifying factors

Modifying factors are demographic variables , sociopsychological variables , structural variables, and Cues to action

In this model modifiable factors are demographic variables such as standard of education, gender, educational status of father, occupation of father, educational status of mother, family income per month, type of family, area of residence, pocket money per month, religion, do you like junk food, where do you get junk food, when do you take junk food, which type of diet you prefer the most, and do you have any medical illness.

Likelihood of action

Likelihood of action is perceived benefits of the action. In this model of likelihood of action are high satisfied quality of life ,normal body Weight ,Awareness about the ill effects of obesity, Regular health check-up ,Regular physical activity ,Emotional Well being ,Feeling health and happiness.

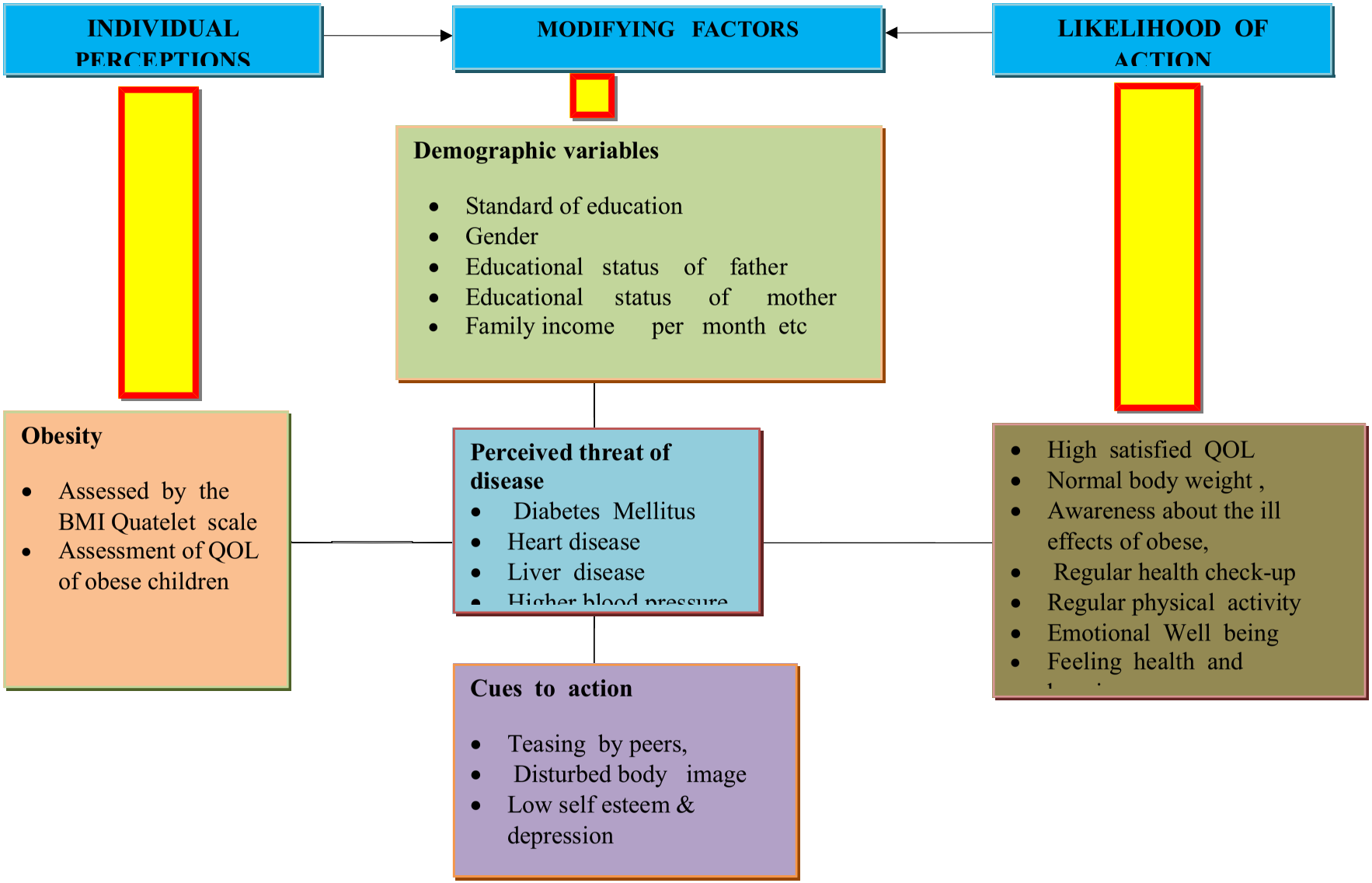

Fig 1:Modified Rosenstock's and becker'shealth belief model (1950)

CHAPTER II

REVIEW OF LITERATURE

Review of literature is a vital component of the research process. It gives the researcher, orientation for the conduction of the study. It provides the source of research ideas for the researcher.

The review of literature is presented under the following section

Section A -studies related to prevalence of obese children

Section B- studies relatedto Factors Associated with obese children

Section C - Studies related Quality of life among obese children

Section A – studies related to prevalence of obese children

Cleyachetty et.al., (2014) conducted a cross sectional study on prevalence of overweight obesity and thinness in 9 to 10 year old children in Mauritius. A cross sectional study was conducted with 412 boys and 429 girls aged 9 -10 years from 23 primary schools were selected using stratified cluster random sampling Technique , collected via anthropometry and self administered questionnaire. The distribution of BMI was 156kg/m^2 in boys and 15.4kg/m^2 in girls, respectively. The concluded that prevalence of overweight was 15.8% prevalence of thinness 12.4% among girls,in boys 95% were overweight, 5% were obese and 13%were him.

Shang et.al., (2013)conducted a study on dietary pattern and its association with the prevalence of obesity and related cardio metabolic risk factors among Chinese children A total of 5267 children were selected using multistage

Dundar .et.al., (2012)conducted a study on obesity related factor in Turkish school children. Cross sectional survey technique was chosen on students including 1271 boys and 1206 girls selected from 20 secondary schools in Samsun,turkey. A predesigned questionnaire was used to elicit the information on individual characteristics. The height and weight of students weremeasured in their classroom. The mean age was between 12-14 years ,and the prevalence of obesity was found at 10.3%. The prevalence of obesity was 10%and 16.8%in public and private school students respectively The study concluded that here were higher numbers of obese students in boys than in girls.

Javed et.al., (2010)conducted a study on prevalence of obesity in school going children in Karachi. A cross-sectional study was done on children studying in grades 6^{th} to 8^{th} grade in different school in Karachi. Height and weight were measured on calibrated from. A modified body mass ides criterion for Asian population was used among 284 students of which 52% were found to be under weight where 34%of all the children were normal of the population 6% was obese.

Vazquez F.L et.al., (2008)conducted a study on prevalence of overweight and obesity among preadolescent school children at Galicia Spain. A random sampling technique was select 23 in school children 10- years of age was analyzed. The prevalence rare of overweight and obesity were respectively 28.8% and 8-6% among girls 31% and 9.2% among boys and 29.9% and 8.9% overall. The study concluded that prevalence rate of overweight and obesity fell significantly increase with age.

Section –B studies related to Factors Associated with obese children

suggested being associated with weight stats were investigate , for example parental obesity, children physical activity and parental obesity history remained statistically significant in the made our findings showed that physical activity and parental obesity history are the most important determinates for childhood obesity in our population. This findings should be considered in implementation of preventive interventions.

Yong et al., (2012)conducted a study on nutritional status and risk factors of overweight for children aged 9-15 years in , southwest china. A multistage random cluster sampling was performed to sample. Over weight and obesity, defined by the age, sex and specific BMI. The study conclude nutritional factors are associated with the childhood obesity.

Morales roan c. et.al., (2012)conducted a study on effectiveness of a diet and physical activity on the prevention of obesity in maxican school children. Sixty schools were selected in the states of maxico, of which 30 were randomly assigned to the intervention group and 30 to the control group. The intervention state aimed to decrease the energy content of school break fasts and include fruits and vegetables as well as increase physical activity and the consumption of water during the time spent at school. The strategy was implemented over a 6month period. The estimated probability of obesity between baseline and the final stage for the decreased 1% for the probability increased 0.9%. this represents the interaction between intervention and stage, which is highly significant.

Mushtaq et.al., (2011) conducted a study on family based factors associated with overweight and obesity among Pakistani primary. School children especially in the affluent urban population. Multistage cluster sampling technique of 1860 children age. All regression analyses were controlled for age and gender and statistical

Whaitaker K.L. et.,al(2008) conducted a study on comparison of maternal and paternal intergenerational transmission of obesity risk in UK. Data were collected from the annual health survey for England carried out between 2001 and 2006. Families with one or two children aged between 2-15 years were included (n=4432 families n=7078children). having two overweight or obese parents was associated with an increased risk of childhood obesity compared with having two normal weight parents independent of age sex socioeconomic status and ethnicity Mother. Child associations for body mass index were significantly stronger then factor child associations were the same for sons and daughters but increased with age.

Bharathi D.R. et.al., (2008)conducted a study on the correlation of overweight and obesity among school going children of wardha city, India .A cross-sectional study was carried out in all the middle schools over weight and obesity found to be 3% and 1.2% and . Obesity final model of the multivariable were urban residence, father and mother involved in the service or business, English medium school and child playing outdoor games for less than 30 min. The magnitude and overweight of overweight or obesity among school going children of city was found to be 4.3% The study concluded that family characteristics play important role in predisposing the children to overweight or obesity and hence the families

Kematche et. al.,(2007)conducted a study on determinants of obesity among school children in Trichy. A comparative study was used for the study. A sample of 150 school children inclusive of 30 obese male and 30 obese male and 45 non obese female were included in the study using disproportionate quota sample method. There was a significant difference between determinants of

habits like. Consumption of carbohydrates and proteins, snacks foods under fast food meal patterns and speed of eating with obesity cannot be down. The study concluded diet as a direct modulator of energy balance, still need to be part of a comprehensive strategy to combat overweight and obesity in children and adolescent

Liorefs et.al., (2007) conducted a study on children overweight and its determinates in Maisons-Alfort France. Representative sample of children aged between 3-14years (n=1016) takesamples. Weight and height leisure time physical activity , sedentary behavior like TV viewing and playing video game were reported to parents or children by answering questionnaires. In total, 15.2% of the children are found to be overweight and obese. The study concluded that Overweight is positively associated with sedentary behavior in childhood and adolescence.

Section –C Studies related Quality of life among obese children

Buttitta M, Iliescu C.,(2013) Conducted a cross sectional study on Quality of life assessment in obese children and adolescents in order to identify the most affected dimensions and better understand associated factor.34 sample selected several variables were associated with QOL such as self-image, bullying, bodily pain, quality of food intake, physical activity, screen time, parents' educational level, and weight status.The research concluded that Identifying variables associated with lower QOL in obese children and adolescents offers new perspectives for prevention and care.Better understanding QOL is a key element essential for the treatment for childhood and adolescent obesity.

Tsiros et.al., (2012) Conducted a study on Effect of overweight and obese weight status on pediatric health-related quality of life at Australia in English reporting

but randomized controlled trials were few and lacked long-term follow-up. The study concluded Pooled regressions suggest paediatric self-reported Health Related Quality Of Life can be predicted from parent proxy reports, although parents of obese youths tend to perceive worse Health Related Quality Of Life than children do about themselves. Thus, future research should include both paediatric and parent proxy perspectives.

Jeffrey., (2012) Cross-sectional study To examine the health-related Quality Of Life of obese children and adolescents compared with children and adolescents who are healthy of 106 children and adolescents (57 males) between the ages of 5 and 18at united state Compared with healthy children and adolescents, obese children and adolescents reported significantly (P<.001) lower health-related Quality Of Life in all domains (mean [SD] total score, 67 [16.3] for obese children and adolescents; 83 [14.8] for healthy children and adolescents). Obese children and adolescents were more likely to have impaired health-related Quality Of Life than healthy children and adolescents (odds ratio [OR], 5.5; 95% confidence interval [CI], 3.4-8.7) and were similar to children and adolescents diagnosed as having cancer (OR, 1.3; 95% CI, 0.8-2.3). The study concluded Severely obese children and adolescents have lower health-related Quality Of Life than children and adolescents who are healthy and similar Quality Of Life as those diagnosed as having cancer. Physicians, parents, and teachers need to be informed of the risk for impaired health-related The study concluded that Quality Of Life among obese children and adolescents to target interventions that could enhance health outcomes

Hamiel et.al., (2011)conductedAcross-sectional study to assess the impact of obesity on health-related quality of life (HRQOL) of children, and to compare Health Related Quality Of Life scores of obese children in a hospital versus community setting.A total of 182 at UK Children and adolescents recruited from the community pediatric clinics and a hospital-based obesity clinic.Obese children reported significantly lower Health Related Quality Of Life in physical, social and school domains compared

Life scores as normal weight children, whereas in the physical domain, a significant difference was documented even in moderate obesity

Joan Williams.,(2010)conducted a cohort study to determine relationships between weight and health-related Quality Of Life reported by parent-proxy and child self-report in a population sample of elementary school children.1456 sample , Australia Of1456 participants, 1099 (75.5%) children were classified as not overweight; 294 (20.2%) overweight; and 63 (4.3%) obese. The effects of child overweight and obesity on health-related Quality Of Life in this community-based sample were significant but smaller than in a clinical sample using the same measureoverweight and obese children across the population, then a substantial proportion of children and adolescents could be experiencing major reductions in health-related Quality Of Life due to their weight

GuannanBai,EstherHafkamp.,(2010) As part of a population based cross sectional study, the Child Health Questionnaire (CHQ) Parental to measure health-related quality of life in school-aged children in a general population sample Netherlands. Parents of 10,651 children aged 4-11 years were interviewed from January 2001 to December 2009.Multivariate and regression analyses demonstrated a declined Child Health Questionnaire Physical Summary score for children who had >1 conditions, disorders or acute health complaints and who were greater consumers of healthcare; children with a non-western immigrant background; and children whose parents did not work. The best predictors of health-related quality of life are variables that describe use of health care and the number of disorders and health complaints. Nonetheless, a number of demographic, socio-economic and family/environmental determinants contribute to a child's health-related quality of life as well.

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CHAPTERIII
METHODOLOGY

RESEARCH APPROACH

The study utilized Quantitative research approach

RESEARCH DESIGN

Descriptive research designwas adopted to this study.

VARIABLES

- Independent variable: Quality of life

Chunkankadai the total strength of the students1510 in the academic year. St. Joseph's Higher Secondary school, thirithuvapuram was also adopted for this study, which is located 18 kilometers away from St. Xavier's Catholic College of Nursing chunkankadai.

POPULATION

Target population

TheTarget population of this study constituted all the obese children those who were studying between 6^{th} to 9^{th} standard

Accessible population

The accessible population of under this study constituted all the obese children .Those who were studying6to 9^{th}standardin L.M.S girls Higher secondary school, Neyyoor and St.Joseph's Higher Secondary School, Thirithuvapuram, at kanyakumari district.

SAMPLING

The researcher selected the obese children who fulfilled the inclusion criteria and exclusion criteria in L.M.S higher secondary school ,neyyoor and St.Joseph/s Higher Secondary school ,thirithuvapuram , at Kanyakumari District.

SAMPLE SIZE

Sample sizewas consist of 33 obese children.

SAMPLING TECHNIQUES

Purposive sampling technique was used for selected the sampling.

- Children having body mass index above 30.

Exclusion Criteria

- Children those who are with endocrine problems
- Children those with physical deformities.

DESCRIPTION OF TOOL

The tool was be used in this study consists of three parts.

PART -1 Demographic variables

The Demographic variables of the study are standard of education, Gender , educational status of father ,occupation of father, educational status of mother, family income per month, type of family, area of residence, pocket money per month, religion, do likeness of junk foods, place of taking junk foods, Time of taking junk foods, Dietary pattern , and medical illness. (Annexure VII)

PART -IIWHO Quartile scale

WHO Quality life scale used to calculate of body mass index by using quatelet scale and they are categories in to four based on their Body Mass Index level. The Body Mass Index According to this scale obese children under four category (Annexure VII)

BMI = Weight (kg)/ Height in meter square (m^2)

Weight category	**BMI Range**
Under weight	<18.5
Health weight	18.5-24.9
Over weight	25.0-29.9

Scoring procedure:

Each question had five Ratings. They were graded by 0, 1, 2, 3 & 4

Score	Quality of Life scale
0-20	Very dissatisfied
21- 40	Moderately dissatisfied
41-60	Slight dissatisfied
61-80	Moderately satisfied
81-100	Very satisfied

CONTENT VALIDITY

For content validity Five experts three experts frompediatric nursing department and twoMedical experts from paediatricdepartment were requested to give their opinion about the content and its relevance, appropriateness of the items. The tools were modified based on their suggestion. (Annexure V)

RELIABILITY

Reliability of the tool was established using test retest method. The "r" value was 0.73 which showed accepted reliability. Hence the tool was considered reliable for proceeding with the study.

PILOT STUDY

In orderto find out the feasibility,relevance and practicability of the tool, Pilot study was

among obese children.The pilot study revealed that it was feasible and practicable to conduct the study at the selected setting and the researcher proceeded to the main study.

METHOD OF DATACOLLECTION

After obtaining formal permission from the principal of St.Xavier's catholic Collage of Nursing, Chunkankadai of L.M.S Higher Secondary School, Neyyoor and St. Joseph's higher Secondary school Thirithuvapuram, at KanyakumariDistrict, the obese children were selected based on the inclusion and exclusion. The researcher obtained oral consent from each sample and proceeded with the data collection. The data was collected from the children studying 6^{th} to 9^{th} standard were assessed by calculation the Body Mass Index level of BMI. The modified WHO quality of life Scale was used to find out quality of life in obese children .Analysis of the data was done by using descriptive and inferential statistics.

PLANFOR DATAANALYSIS

Collected data was analyzed byusingdescriptiveandinferential statistics.

Descriptive statistics

- Frequent and percentage distribution were used to analyze the Demographic variable
- Mean and standard deviation used to assess the quality of life in obese children.

Inferential statistics

Chi-square test used to associate there Quality Of Life among with theselected demographic variable.

from each sample before starting the data collection. Assurance was given to the study subjects regarding the confidentiality of the data collection.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with analysis and interpretation of the data to assess quality of life among obese children. The data collected from the samples were tabulated, analyzed and preserved in the tables and interpreted under the following sections based on the objectives and hypotheses of the study.

SECTION A

1.Prevalence of obesity among children

SECTION B

2.Distribution of thedemographic variables on Quality Of Life among obese children

SECTION C:

3.2 Assessment on Quality Of Life among obese children related to Family relationship

3.3 Assessment on Quality Of Life among obese children psycho social aspect

SECTION A

PREVALENCE OF OBESITY AMONG CHILDREN

Table 1 Prevalence of obese children:

N=33

S.No	Name of the School	Total number of student	Obese children	Percentage (%)
1	LMS Higher Secondary School, Neyyoor	154	20	12.98
2	St. Joseph's Higher Secondary School, Thirithuvapuram	128	13	10.15

Table 1:Represents the prevalence of obesity among children .Samples were collected from L.M.S Higher secondary school and St. Joseph's Higher Secondary School Thirithuvapuram. The total Number of student in L.M.S Higher Secondary School were 20(12.98%) children were found obese .In St. Josph's Higher Secondar School total Number of student 128. Out of 128 children 13 (10.15%) were found as obese .The prevalence of obesity among children was 11.70%.All the obese children33(11.70%) were selected for the study as a sample.

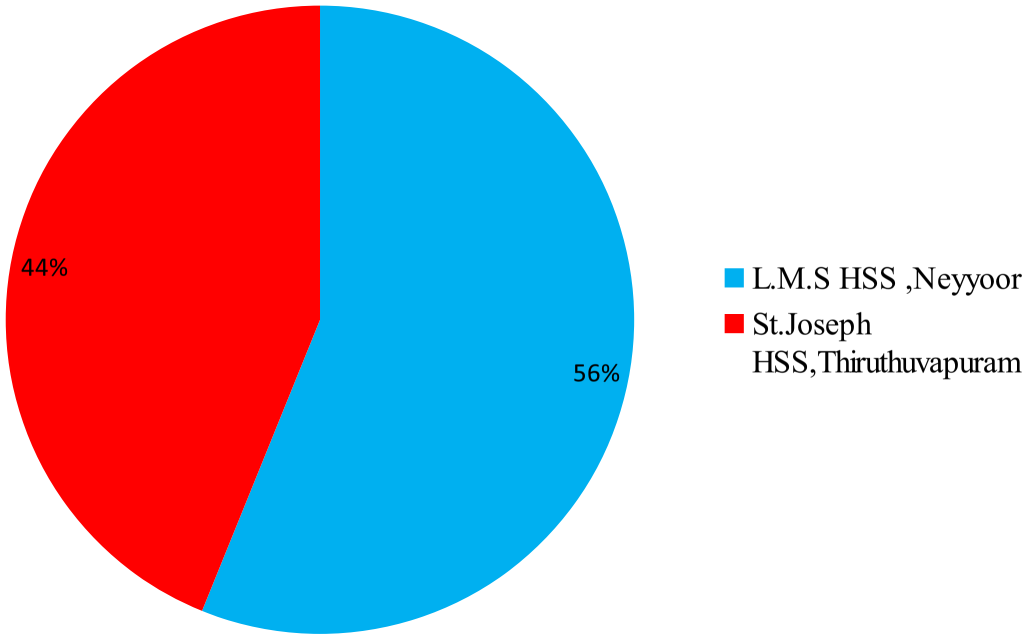


Fig- 1.1 Prevalence of Obesity among Children

SECTION B

DISTRIBUTION OF DEMOGRAPHIC VARIABLES ON QUALITY OF LIFE AMONG OBESECHILDREN.

1	**Standard of education**		
	a) 6 th	10	30.30
	b) 7 th	4	12.12
	c) 8 th	12	36.36
	d) 9 th	7	21.21
2	**Gender**		
	a) Female	21	63.63
	b) Male	12	36.36
3	**Educational status of father**		
	a) Illiterate	7	21.21
	b) Primary	8	24.24
	c) Higher secondary	2	6.06
	d) Graduate and above	16	48.48
4	**Occupation of father**		
	a) Self Employee	7	21.21
	b) Private Employee	8	24.24
	c) Government Employee	2	6.06
	d) Coolie	16	48.48
5	**Education Status of Mother**		
	a) Illiterate	3	9.09
	b) Primary	16	48.48
	c) Higher secondary	10	30.30
	d) Graduate and above	4	12.12
6	**Family Income per month**		
	a) Less than 2,000	7	21.21
	b) Rs 2,001 to 5,000	11	33.33
	c) Rs 5,001 to 10,000	15	45.45
7	**Type of Family**		

	b) Rural	19	57.57
9	**Pocket money per month**		
	a) no pocket money	15	45.45
	b) Rs.1 to 100	10	30.30
	c) Rs.101 to 200	5	15.15
	d) Rs. above 200	3	9.09
10	**Religion**		
	a) Hindu	12	36.36
	b) Christian	18	54.54
	c) Muslim	3	9.09
	d) Others	0	0
11	**Do you like junk foods**		
	a) Yes	25	75.75
	b) N0	8	24.24
12	**Where do you get junk foods**		
	a) Home	16	49.49
	b) School canteen	5	15.15
	c) Fast food corner	12	36.36
	d) Playground	0	0
13	**When do you take junk food**		
	a) Watching TV	22	66.66
	b) Participating in parties	9	27.27
	c) In the coffee shop	2	6.06
	d) During lunch	0	0
14	**Which type of diet do you prefer the most**		
	a) Vegetarian	18	54.54
	b) Non vegetarian	15	45.45

Table 2 Represents the distribution of demographic variables among Obese children, regarding Standard of education 10 (30.30%) were 6th standard , 4 (12.12%) were 7th standard , 12 (36.36%) were 8th standard and 7 (21.21%) were 9th standard.

According to the Gender21(63.63%) were female children and 12(36.36%) were male children

Allocation of the educational status of obese children's father, 7(21%) were illiterate,17(52%) were primary school, 8(24%) were higher secondary and 2(6.06%) were graduates.

According to the occupation of father 7((21.21%) were self employees, 8(24.24%) were private employees, 2(6.06%) were Government employees, 16 (48.48%) coolies workers.

According to the educational status ofmother 3(9.09%) were illiterate,16(48.48%) were primary school,10(30.30%) were higher secondary and4(12.12%) weregraduates.

Dispersion of the obese children's family income per Month,7(21.21%) were receivingless than Rs.2000 per month. 11(33.33%) were receiving Rs,2001 toRs.5000 per month,15(45.45%) were receiving Rs.5001 to Rs.10000 per month.

Scattering of obese children's family pattern, 27(81.81%) werenuclear family , 6(18.18%) were from joint family and 0(0%) were from extended family

Scattering to the obese children's Area of residence, 14(42.42%) were from semi urban and19(57.57%) were from rural

Based on the pocket money per month 15(45.45%) children were not getting pocket money ,10(30.30%) were getting Rs.1 to Rs.100,5(15.15%) were getting Rs.101

According to like of junk foods 25(75.75%) children like junk food and 8(24.24%) children doesn't like junk food

According to place of getting junk foods, 16 (48.48%) were getting from home,5 (15.15%) were getting form school canteen, 12(36.36%) were getting from fast food corner and non of them were getting from play ground

According to time of taking junk foods 22(66.66%) were having whilewatching TV,9(27.27%) were having during participating in parties,2(6.06%) were getting from coffee shop and none of them were having during lunch time

Allocation obese children according to the dietary pattern 18(54.54%) were vegetarian and 15(45.45%) were non vegetariRegardingmedical illness 4(12.12%) were having medical illness and 29(87.87%) were not having any medical illness

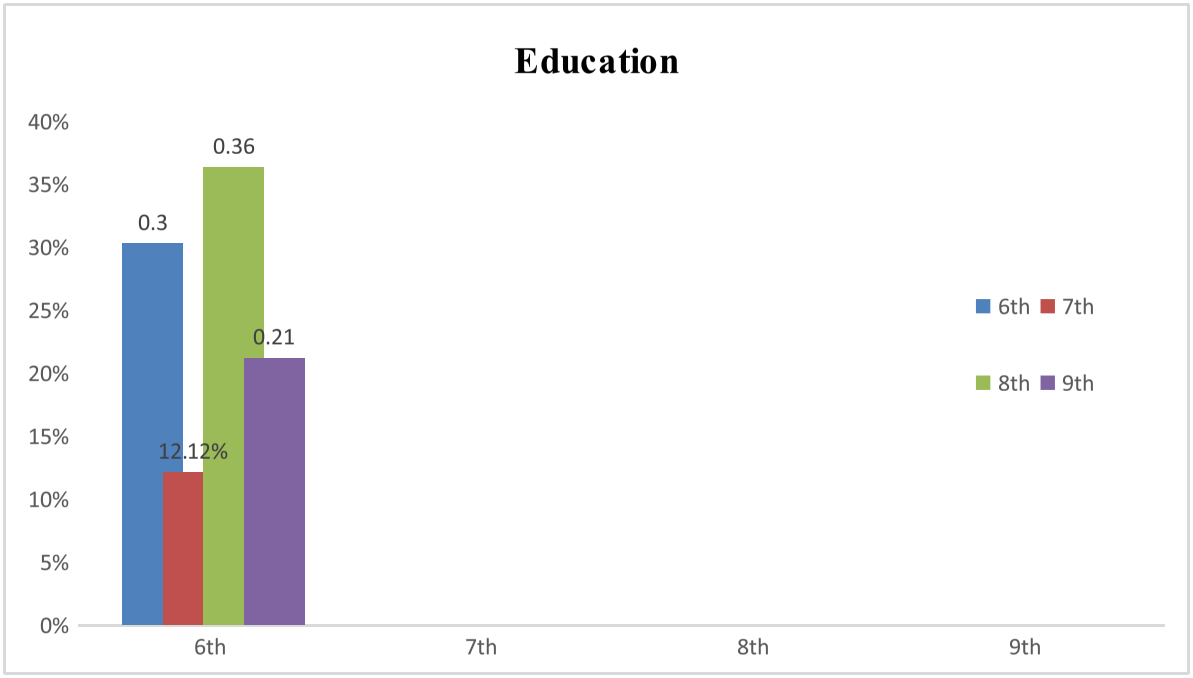


Fig-2.1 percentage distribution of Standard of education among obese children

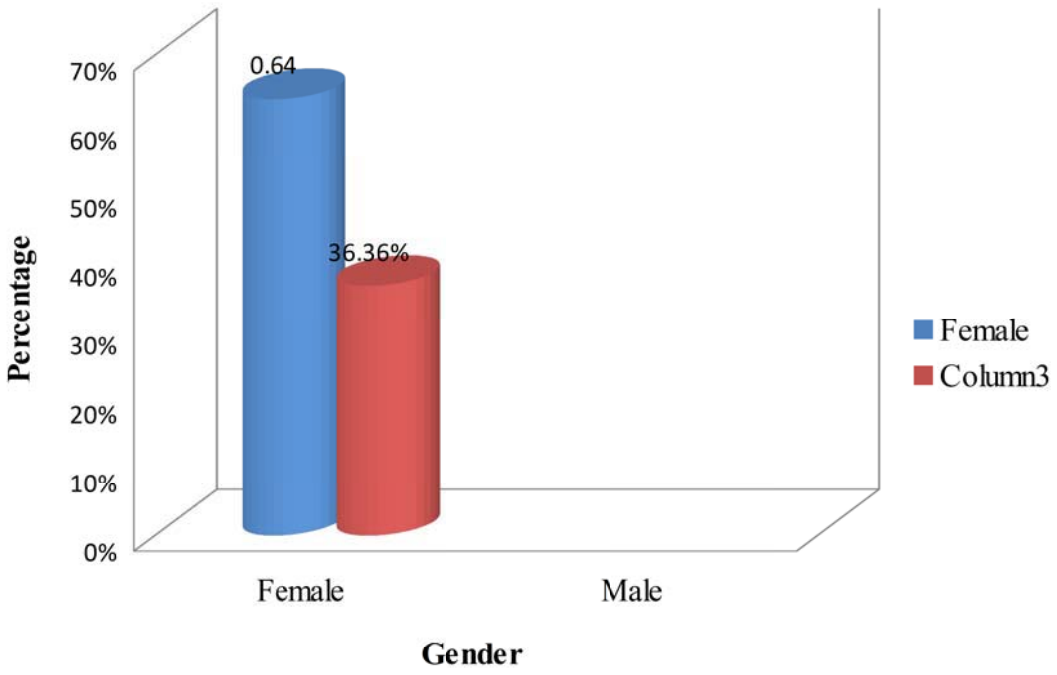


Fig-2.2Percentage distribution of Gender among obese children

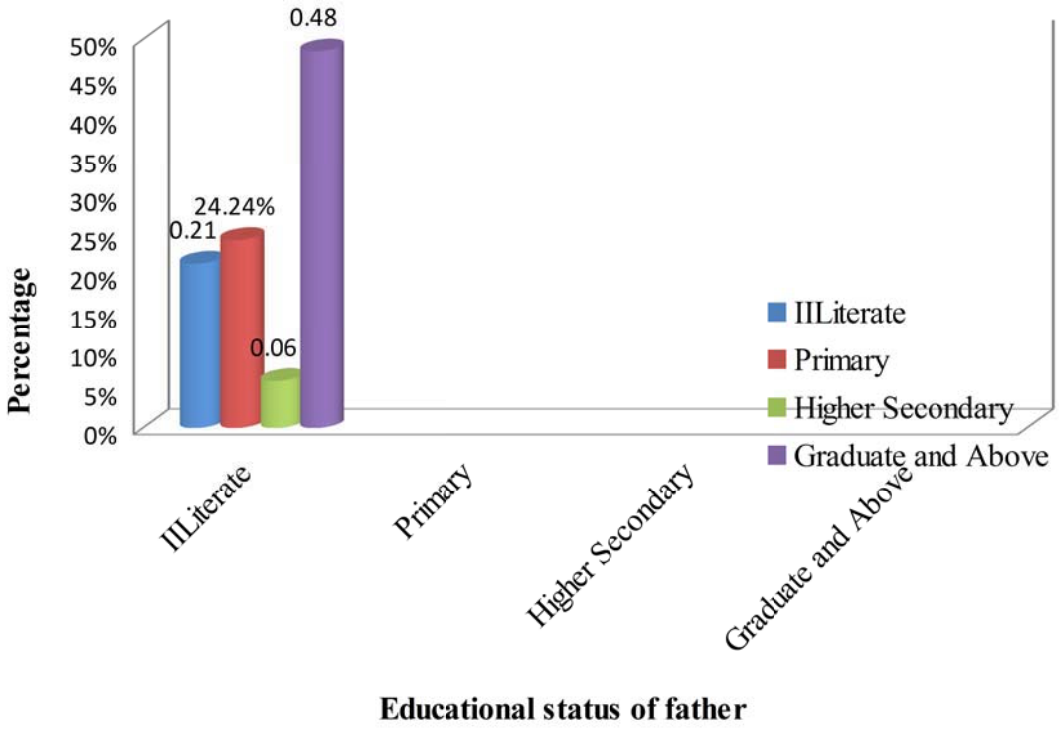


Fig-2.3percentage distribution of educational status of father among obese children

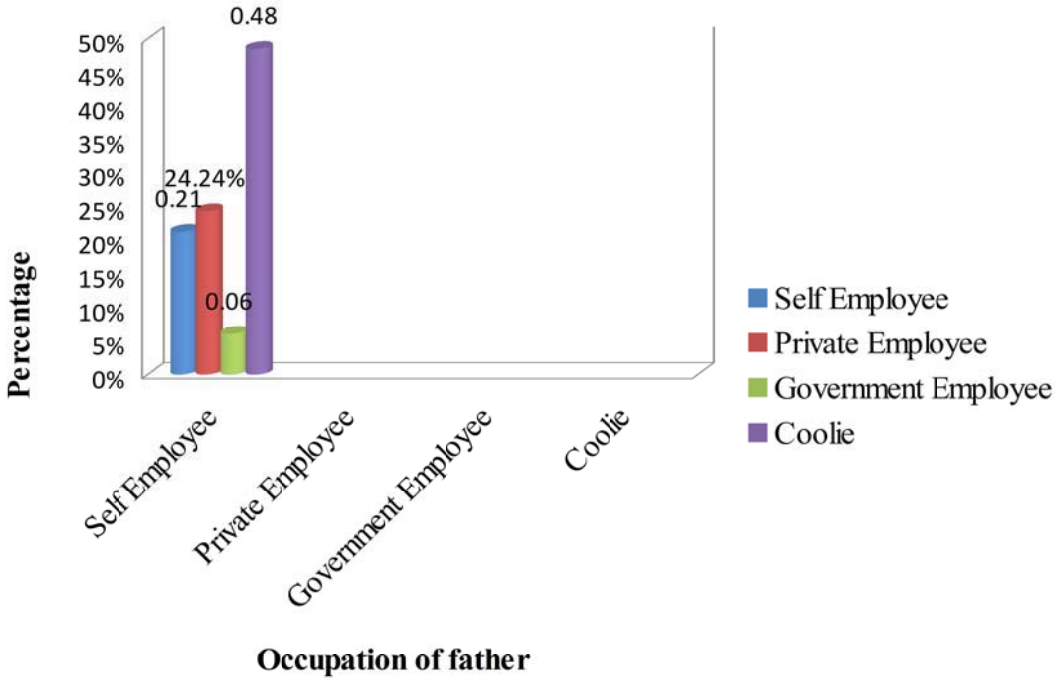


Fig-2.4 percentage distribution of Occupation of father among obese children

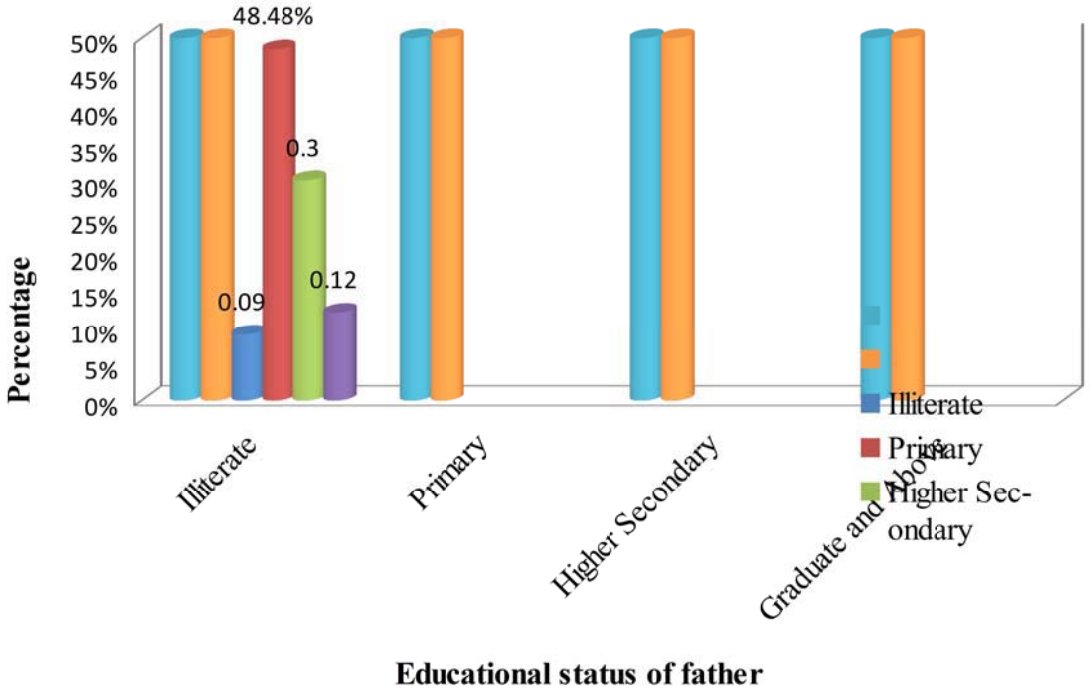


Fig-2.5 percentage distribution of Educational status of mother among obese children

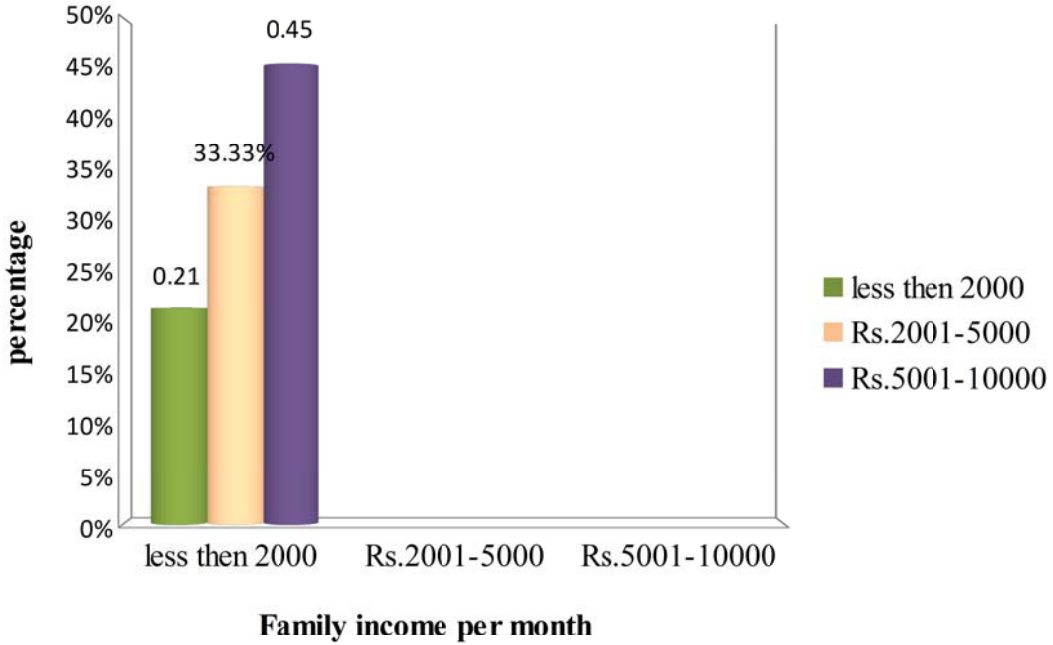


Fig-2.6 percentage distribution of Family income among obese children

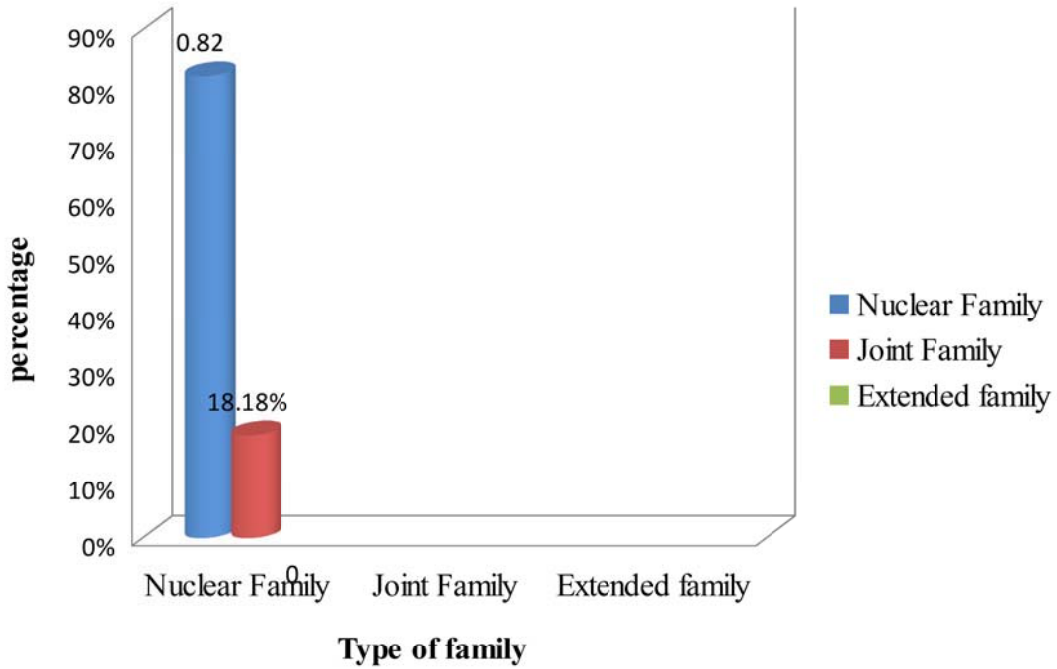


Fig-2.7 percentage distribution of type of family among obese children

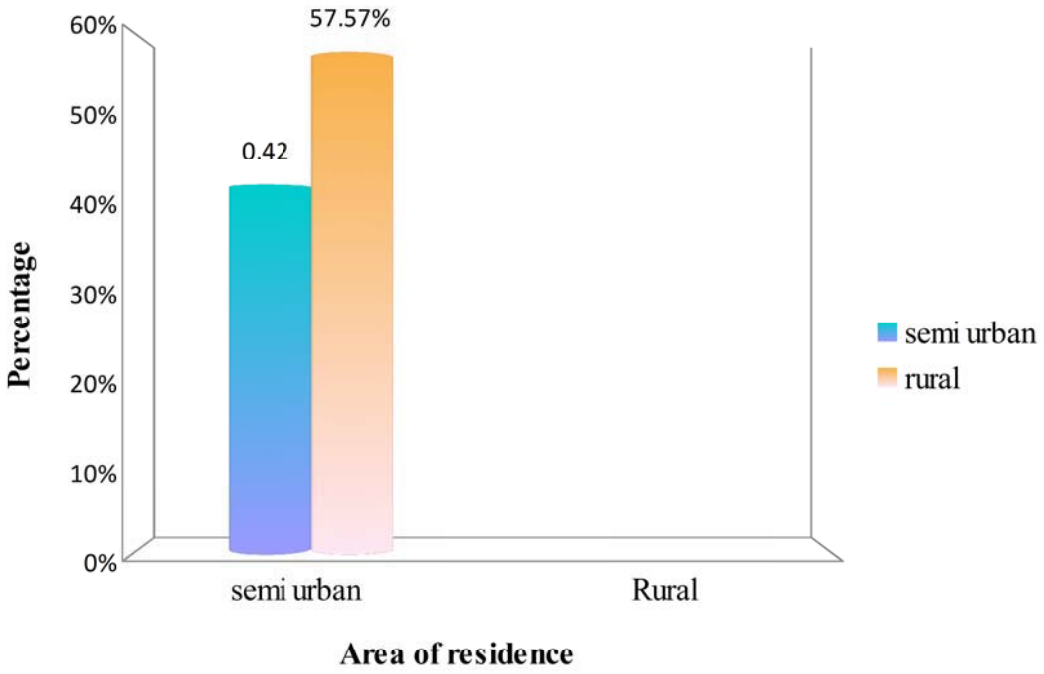


Fig-2.8 percentage distribution of Area of residence amongobese children

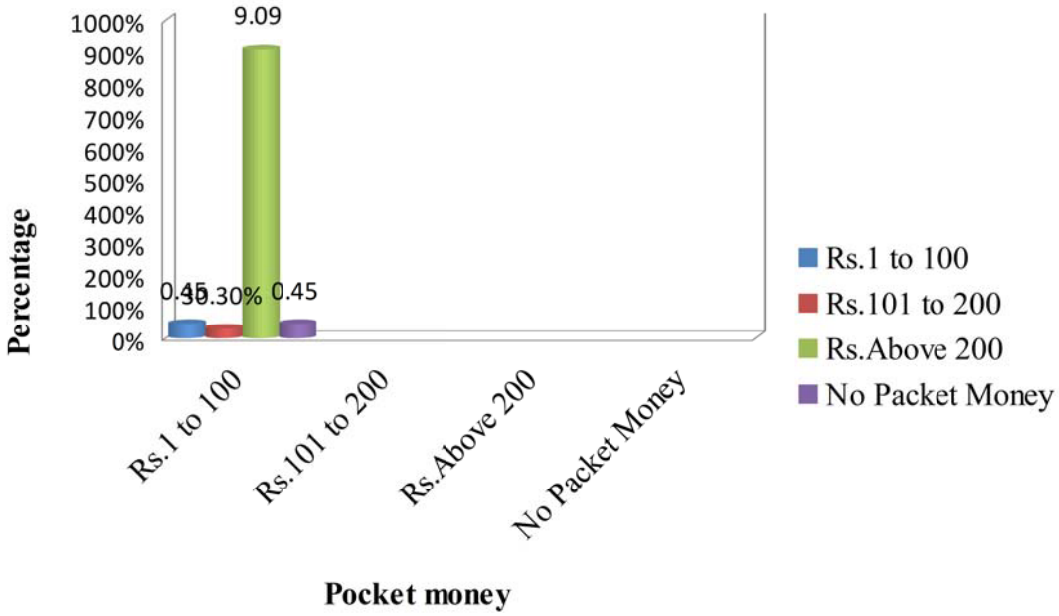


Fig-2.9percentage distribution of pocket money among obese children

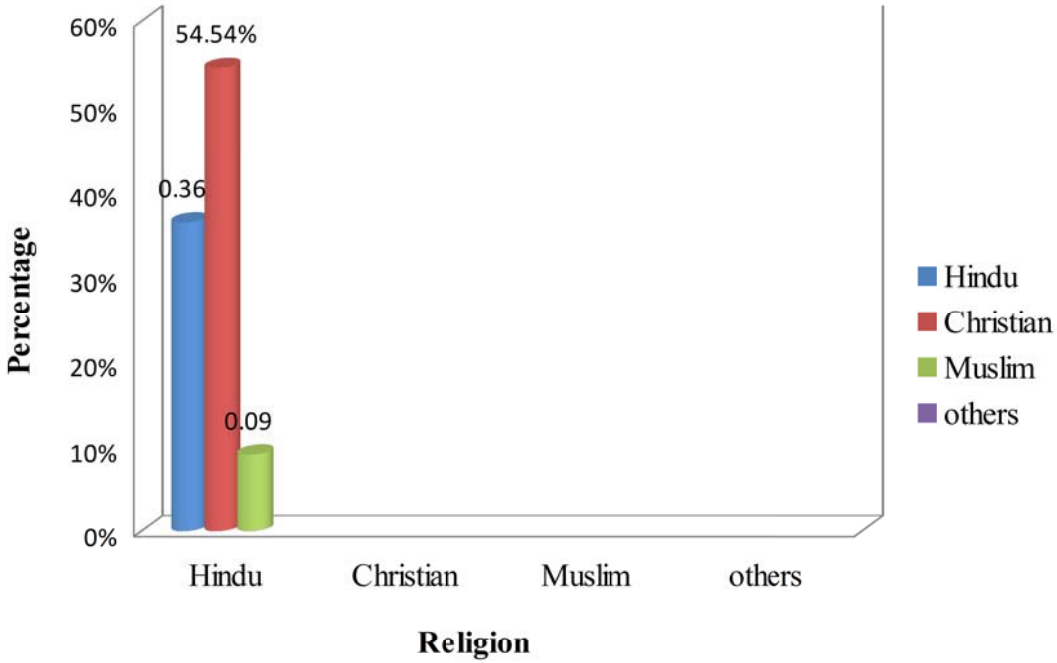


Fig-2.10percentage distribution of Religion among obese children

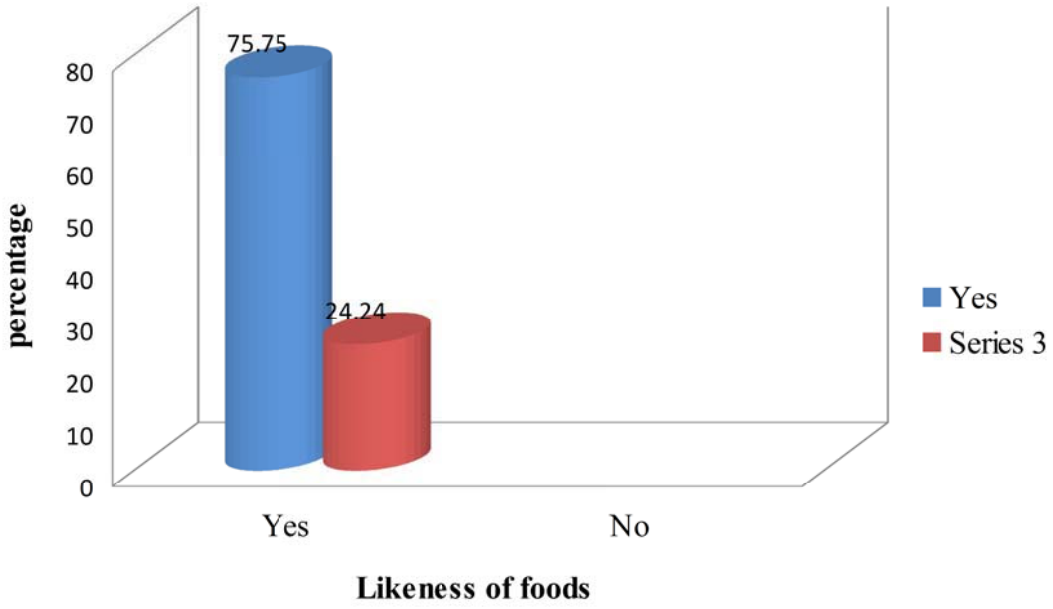


Fig-2.11percentage distribution of Likeness of junk foodsamong obese children

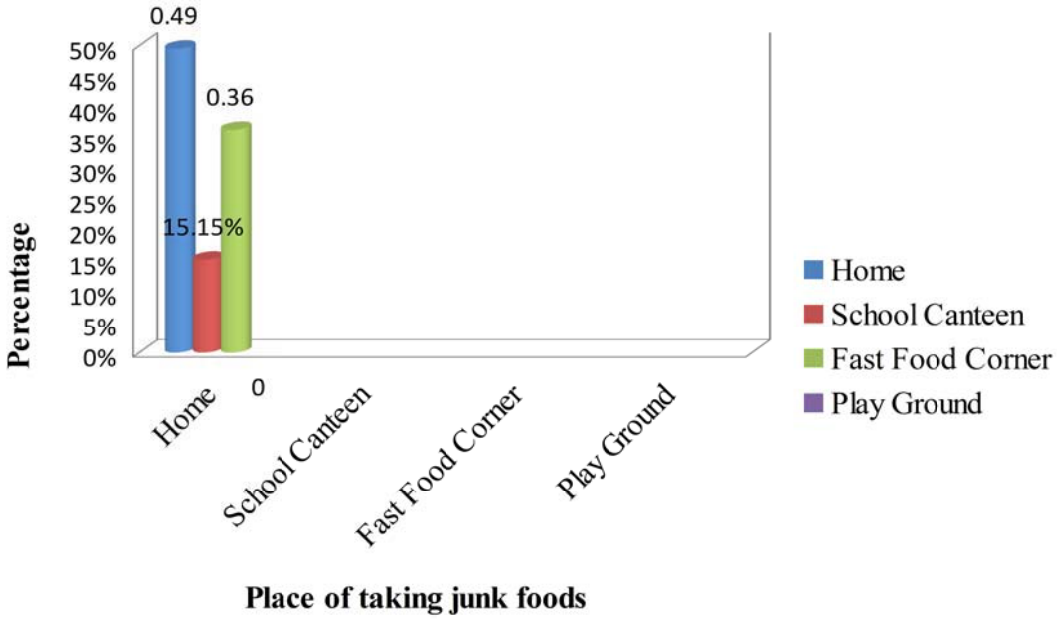


Fig-2.12percentage distribution of place of taking junk food among obese children

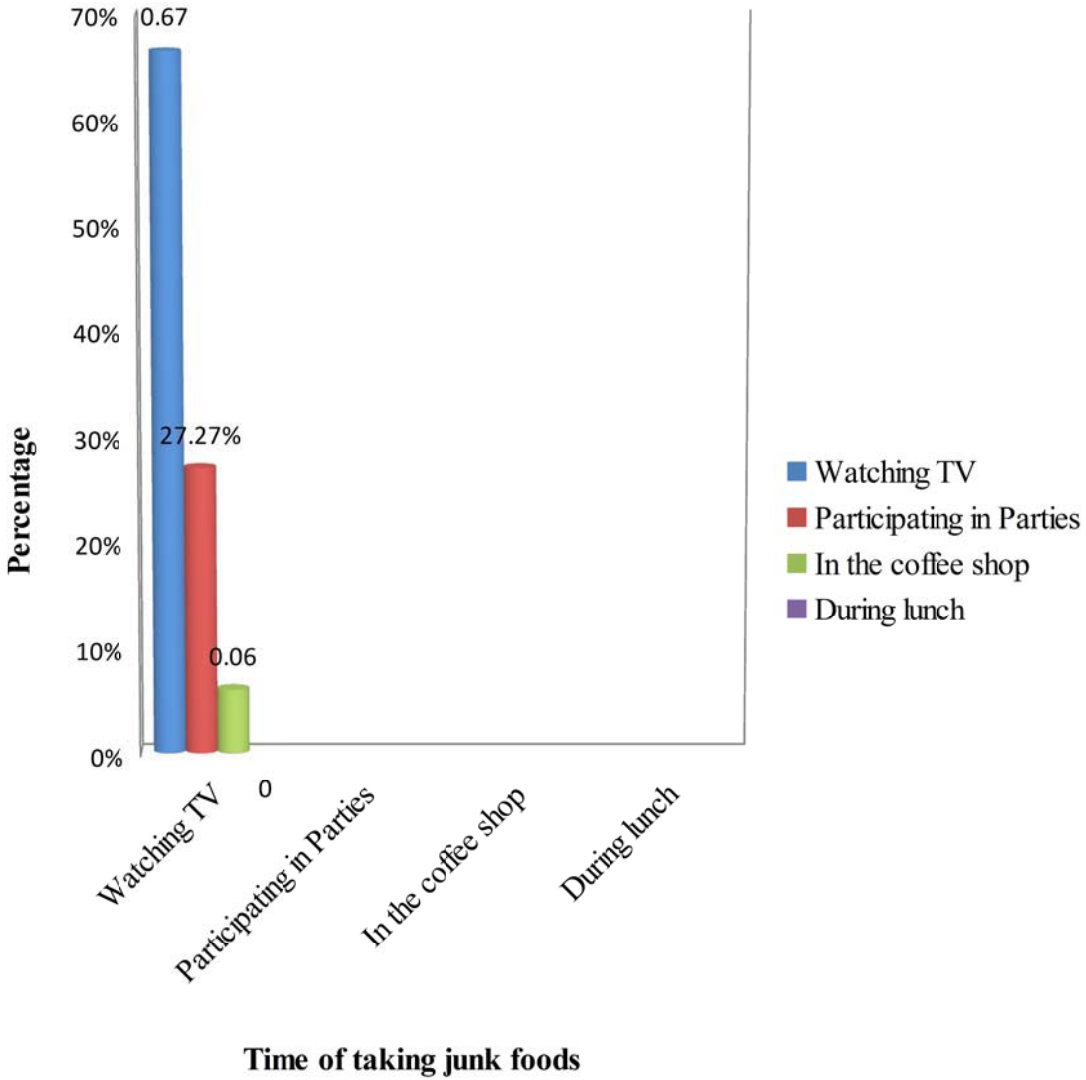
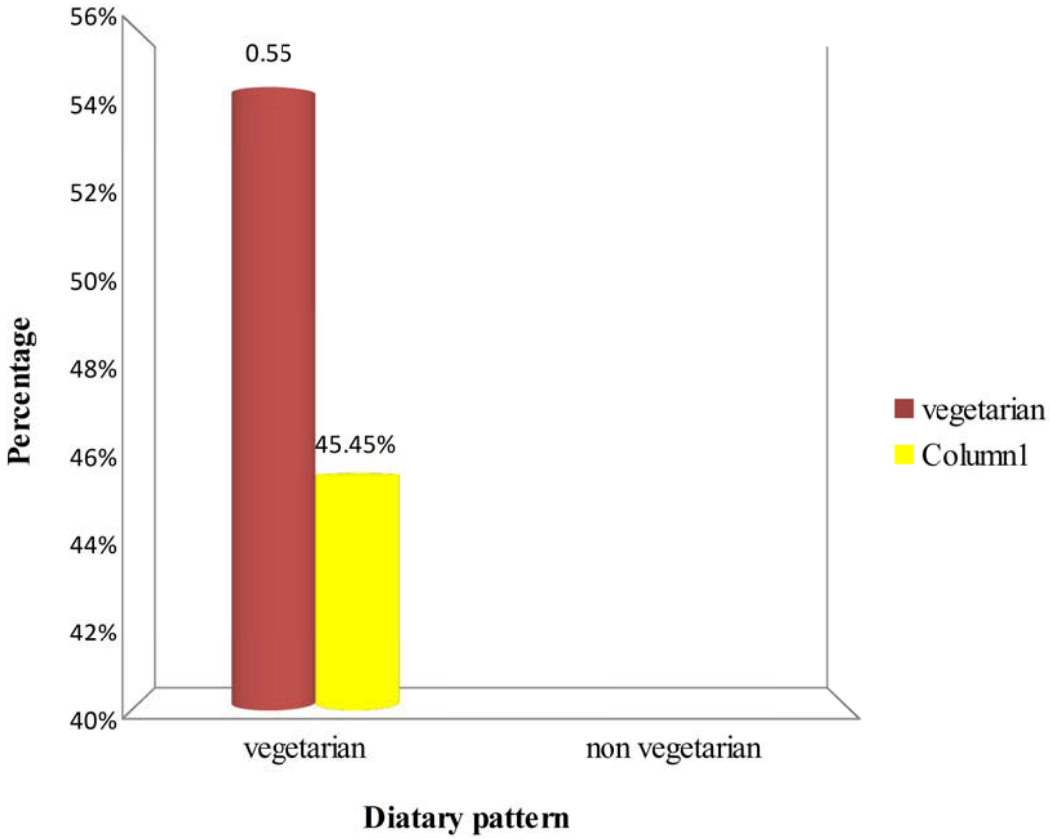


Fig-2.13 percentage distribution of time of taking junk foods among obese children


56%
54%
52%
50%
48%
46%
44%
42%
40%
Percentage
0.55
45.45%
vegetarian
Column1
vegetarian
non vegetarian
Diatary pattern

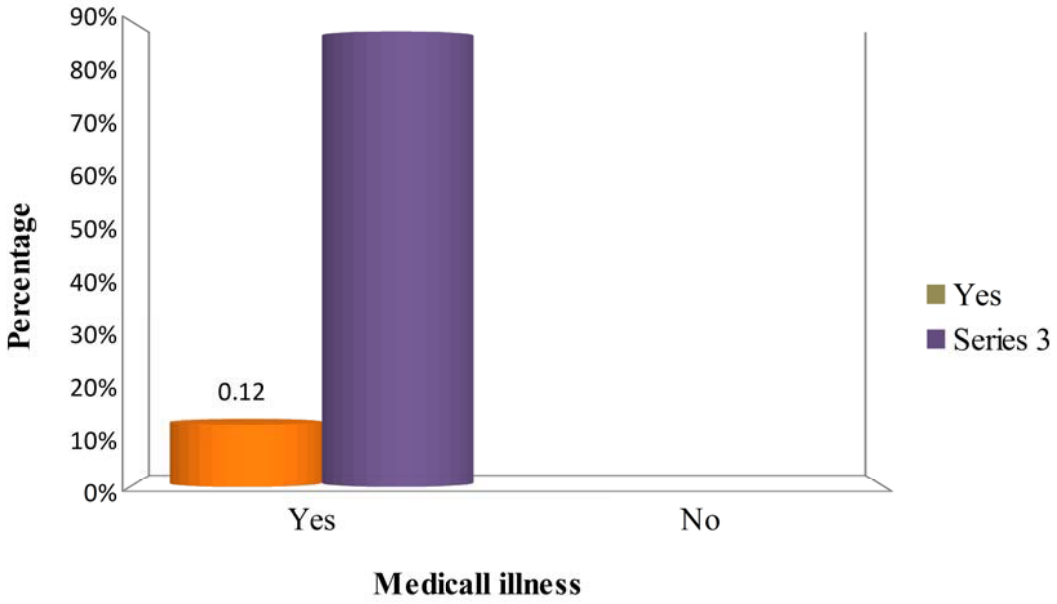


Fig-2.15 percentage distribution Medical illness among obese children

SECTION-C

Assessment on Quality Of Life among obese children

Table 3 Assessment on Quality Of Life among Obese children

N=33

S.no	Quality of life among children	Frequency (f)	Percentage (%)
1	Very dissatisfied	0	0
2	Moderately dissatisfied	5	15.15
3	Slightly dissatisfied	20	60.60
4	Moderately satisfied	7	21.21
5	Very satisfied	1	3.03

Table 3 Represents Quality Of Life among obese children. In this no one was verydissatisfied, 5(15.15%) were Moderately dissatisfied , 20(60%) were slightly dissatisfied 7(22%,) were moderately satisfied . 1(3.03%) very Satisfied

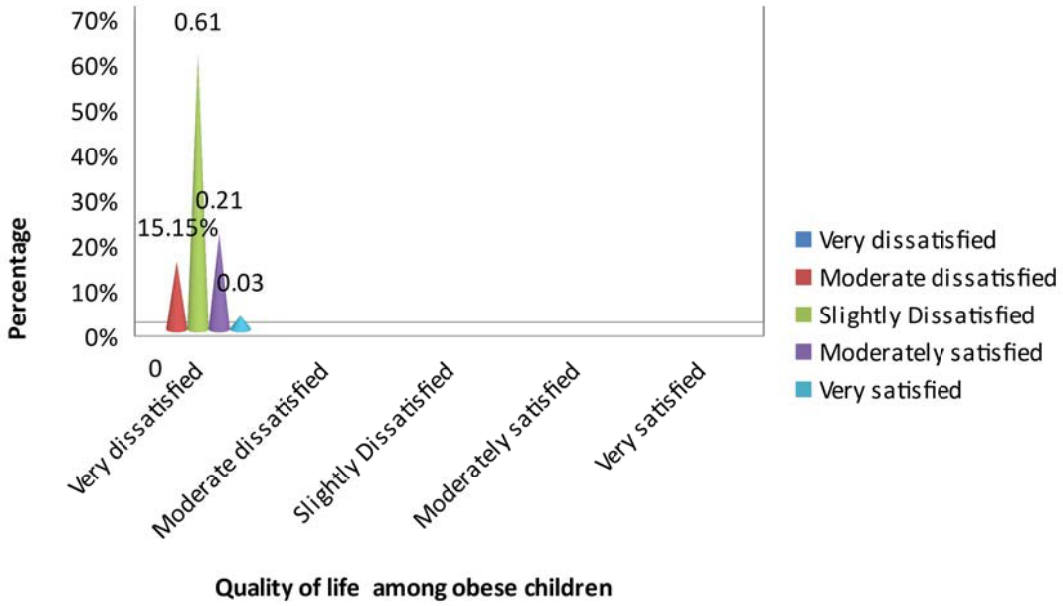


Fig 3.1 Quality Of Life among obese children

Table:3.1 Assessment on Quality Of Life among obese children related to health aspect

N=33

s.no	Health aspects	Frequency (f)	Percentage (%)
1	Very dissatisfied	0	0
2	Moderately dissatisfied	2	6.06
3	Slightly dissatisfied	18	54.54
4	Moderately satisfied	9	27.27
5	Very satisfied	4	12.12

Table 3.1 RepresentsQuality Of Life among obese children on health aspect , none were very dissatisfied ,2(6.06%) Were Moderately dissatisfied,18 (54.54%) Were slightly dissatisfied,9 (27.27%) Were moderately satisfied .4(12.12%) Were satisfied.

Table: 3.2Assessment on Quality of Life among obese children related to Family relationship

N=33

S.no	family relationship	Frequency (f)	Percentage (%)
1	Very dissatisfied	0	0
2	Moderately dissatisfied	10	30.30
3	Slight dissatisfied	16	48.48
4	Moderately satisfied	7	21.22
5	Very satisfied	0	0

Table 3.2 Represents Quality Of Life among obese children on family relationship no one were very dissatisfied . 10(30%) were moderately dissatisfied, 16 (48.48%) Were slightly dissatisfied, 7(21.22%) Were moderately satisfied.no one were Satisfied.

Table 3.3Assessment on Quality Of Life among obese children on psycho social aspect

N=33

S.no	Quality of life psycho social aspect	Frequency (f)	Percent (%)
1	Very dissatisfied	0	0
2	Moderately dissatisfied	6	18.18
3	Slight dissatisfied	17	51.51
4	Moderately satisfied	9	27.27
5	Very satisfied	1	3.03

Table 3.3Represents Quality Of Life among obese children on psycho social aspect, in this none was very dissatisfied,6(18.18%) were Moderately dissatisfied ,17(51.51%) were slightly dissatisfied 9(27.27%,) were moderately satisfied . 1(3.03%) were satisfied.

SECTION D

ASSOCIATION OF QUALITY OF LIFE AMONG OBESE CHILDREN WITH SELECTED DEMOGRAPIC VARIA BLES.

Table 4Association of Quality Of Life among Obese children with selected demographic variables.

N= 33

SINO	DOMOGRAPHIC VARIABLE	SATISFIED VERY	FIEDMODERATELY	SATISFIEDSLIGHT	ISFIED MODERATELY	SATISFIEDVERY	SQUARE (χ^2)CHI
1	Standard of Education a) 6th b) 7th c) 8th d) 9th	0 0 0 0	5 3 5	4 2 2	3 3 2	0 4	χ^2= 12.989 df=12 Table value 21.026
2	Gender a) Female b) Male	0 0	7 4	6 3	9 4	0 0	χ^2= 1.096 df=4 Table

	b) Primary c) Higher secondary d) Graduate and above	0 0 0	2 3 1	4 3 2	2 2 5	0 0 0	table value 21.026
4	Occupation of father a) Self employee b) Private employee c) Government employee d) coolie	0 0 0 0	3 2 3 3	2 3 2 3	4 2 3 3	0 0 0 0	χ^2= 6.114 df= 12 table value 21.026
5	Education Status of Mother a) Illiterate b) Primary c) Higher Secondary d) Graduate and above	0 0 0 0	2 1 3 1	4 3 2 2	2 4 2 3	2 2 1 0	χ^2= 6.114 df=12 table value 21.026
6	Family income per month						χ^2= 4.261

	to 10,000	0	3	4	4	3	
7	Typeof Family a) Nuclear family b) Joint family c) Extended Family	0 0 0	3 2 2	4 3 4	3 4 3	2 0 3	χ^2= 0.484 df= 8 Table value 15.507
8	Are of residence a) Semi urban b) Rural	0 0	7 5	8 4	5 4	0 0	χ^2= 1.563 df= 4 Table value 9.488
9	Pocket money per month a) No pocket money b) Rs.1to 100 c) Rs.101 to 200 d) Rs. above 200	0 0 0 0	3 4 4 2	2 4 3 4	1 1 2 3	0 0 0 0	χ^2= 6.819 df= 12 Table value 21.026
10	Religion a) Hindu b) Christian	0 0	3 2	4 5	3 4	0 0	χ^2= 19.997 df =12 table

	b) No	0	6	8	3	0	value 9.488
12	Place of taking junk food a) Home b) School canteen c) Fast food corner d) Play ground	 0 0 0 0	 3 2 3 3	 2 3 4 5	 2 2 1 3	 0 0 0 0	χ^2= 4.604 df=12 table value 21.026
13	Time of take junk foods a) Watching TV b) Particpating in parties c) In the coffee shop d) During lunch	 0 0 0 0	 3 3 4 0	 4 4 3 0	 3 4 4 0	 0 0 0 0	χ^2= 11.667 df=12 Table value 21.026
14	Dietary pattern a) Vegetarian b) Non	0	4	6	5	0	χ^2= 12.247

15	Do you have any medical illness a) Yes b) No	 0 0	 2 8	 3 9	 2 9	 0 0	χ^2= 0.733 df= 4 table value 9.488

Table 4Associationofquality of life among obese children and selected demographic variables. Considering the standard of education chi square value is 12.989. The table valueatdegreesoffreedom12was 21.026. As per Gender chi square valuewas1.096,andthe table value at degrees of freedom value was 9.488. Regarding the educational status of father, chi square value was 3.8403and the table value at the degree of freedom12.Was 21.026. According to occupation of father chi square value was 5.541,the table value at degrees of freedom twelve was 21.026. Considering the educational status of mother chi square value is 6.114,the table value at degrees of freedom12was21.026. Regarding Family income per month chi square value was 4.261, table value at degrees of freedom 8 was 15.50. As per type of chi square value is 0.484 the table value at degrees of freedom 8 was 15.507. regarding the area of residence, the chi square value is 1.563, table value at degrees of freedom 4 was 9.488. According to pock money per month, chi square value was 6.819. table value at degrees of freedom 12 is 21.026. Considering is religion chi square value 19.997 , at table value and degree of freedom 12 was 21.026Considering likeness of junk foods chi square value was 4.604, and degrees of freedom 12 was 21.026. Regarding time of taking junk foods, chi square was11.667,table value at degrees of freedom 12 was21.026. According to dietary pattern chi-square value was 12.247, table value at degrees of freedom 4 was9.488 . Considering medical illness, chi square value was 0.733 table

month type of family, area of residence, pocket money per month, religion, do you like junk food, where do you get junk food, when do you take junk food, which type of diet you prefer the most, and do you have any medical illness. Hence hypothesis is H_1 is not accepted.

This chapter deals with data analysis and interpretation in the form of statistical value based on the objectives. Chi square test is used find association between quality of life among obese children with selected demographic variables .

The descriptive study was conducted to assess the quality of life among obese children of selected school in Kanyakumari district. This has discussed with the, objective and hypotheses.

Distribution of samples according to their demographic variables. .

Represents the distribution of demographic variables among Obese children, regarding Standard of education ,4 (12.12%) were 7th standard , 12 (36.36%) were 8th standard .According to the Gender 21(63.63%) were female and 12(36.36%) were male. Allocation of the educational status of obese children's father,17(52%) were primary school, and 2(6.06%) were graduates. According to the occupation of father 2(6.06%) were Government employees, 16 (48.48%) coolies workers. According to the educational status of mother 3(9.09%) were illiterate, 16(48.48%) were primary school, Dispersion of the obese children's family income per Month,7(21.21%) were receiving less than Rs.2000 per month,15(45.45%) were receiving Rs.5001 to Rs.10000 per month. Scattering of obese children's family pattern, 27(81.81%) were nuclear family , 6(18.18%) and 0(0%) were from extended family. Scattering to the obese children's Area of residence, 14(42.42%) were from semi urban and19(57.57%) were from rural. Based on the pocket money per month 15(45.45%) children were not getting pocket money , 3(9.09%) were getting Rs. 200 and above. Allocation of Obese children's religion , 12 (36.36%) were Hindu, 18(54.54%) were Christian and 3(9.09%) were Muslim. According to the like of junk foods 25(75.75%) children like junk food and 8(24.24%) children doesn't like junk food. According to the place of getting junk foods, 16 (48.48%) were getting from home, 5 (15.15%) were getting form school canteen. According to the time of taking junk foods 22(66.66%) were having while watching TV, and none of them were having during lunch time. Allocation of obese children according to the dietary pattern 18(54.54%) were vegetarian and 15(45.45%) were non

Represents the prevalence of obesity among children .Samples were selected from L.M.S Higher secondary school and St. Joseph's Higher Secondary School Thirithuvapuram. The total Number of student in L.M.S Higher Secondary School were 154.Out of 154 20 (12.98%) children were found obese .In St. Josph's Higher Secondar School total Number of student 128. Out of 128 children 13 (10.15%) were found as obese .The prevalence of obesity among children was 12.17%.All the obese children 33(11.70%) were selected for the study as a sample.

Charoo B et al (2010) conducted a study to assess the prevalence of obesity among school children. obesity is increasing at an alarming rate throughout the world. Today it is estimated that there are more then300million obese people worldwide. Breast feeding is protective against obesity .adults children are to be watched for gain in height rather than reduction of less then10% is a normal variation, not significant in obesity. eighty percent over weight 10-14 year old adolescents are at risk of becoming overweight adults compared to 25% of overweight preschool children (<5 years old) and 50% of 6-9 year old overweight children .obesity in childhood and adolescence has been related to an increase in mortality in adulthood on follow up.

Second objective was to assess the quality of life obese children

Represents Quality Of Life among obese children in this no one was very dissatisfied, 5(15.15%) were Moderately dissatisfied , 20(60%) were slightly dissatisfied 7(22%,) were moderately satisfied . 1(3.03%) very satisfied.

Represents Quality Of Life among obese children on health aspect , no one were very dissatisfied , 2(6.06%) Were Moderately dissatisfied, 18 (54.54%) Were slightly dissatisfied, 9 (27.27%) Were moderately satisfied. 4(12.12%) very satisfied.

Represents Quality Of Life among obese children on family relationship no one were

were slightly dissatisfied 9(27.27%,) were moderately satisfied . 1(3.03%) were very Satisfied.

Third objective was to find association between the quality of life among obese children

shows the quality of life among obese children and selected demographic variables. Considering the standard of education chi square value was 12.989 . The table value at degrees of freedom12.As per sex chi square value was 1.096, and the table value at degrees of freedom value was 9.488. Regarding the educational status of father, chi square value was 3.8403 and the table value at the degrees of freedom12.is21.026. According to occupation of father chi square value was 5.541, the table value at degrees of freedom twelve was 21.026. Considering the educational status of mother chi square value is 6.114, the table value at degrees of freedom 12 was 21.026. Regarding Family income per month chi square value was 4.261, table value at degrees of freedom 8 was 15.50. As per the type of family chi square value is 0.484 the table value at degrees of freedom 8 was 15.507.regarding the are area of residence, the chi square value is 1.563, table value at degrees of freedom 4 was 9.488. According to pock money per month, chi square value was 6.819. table value at degrees of freedom 12 is 21.026. Considering is religion chi square value 19.997 , at table value and degree of freedom 12 was 21.026 Considering likeness of junk foods chi square value was 4.604, and degrees of freedom 12 was 21.026. Regarding time of taking junk foods, chi square was11.667 , table value at degrees of freedom 12 was 21.026. According to dietary pattern chi square value was 12.247 table value at degrees of freedom 4 was 9.488 . Considering medical illness, chi square value was 0.733, table value at degree of freedom 4 was9.488.

The quality of life among obese children was assessed. Dietary pattern the calculated vale of grater then table value which indicates there is a significant association between quality of life among obese children with the selected demographic variables such as standard of education, Gender, educational status of father, occupation of father, educational status of mother, family income per month, type of family, area of residence, pocket money per month, religion, do you like junk food, where do you get junk foods, when do you take junk foods, which type of diet you prefer the most, and do you have any medical illness.

This chapter dealt with the discussion of the study with reference to the objectives and supportive study. Among there objectives and are hypothesis were accepted in this study.

CHAPTER VI

SUMMARY, CONCLUSION,IMPLICATIONS AND RECOMMENDATIONS

This chapter deals with summary, conclusion, nursing implementations, limitations, and recommendations.

SUMMARY

This study was undertaken on quality of life among obese children. A quantitative research approach with descriptive study is analyzed. This study is conducted at LMS Higher Secondary School, Neyyoor and St. Joseph Higher Secondary School, Thirithuvapuram. By using purposive sampling techniques. 33 samples are selected. The data are collected and analyzed by using descriptive and informational statistics. The level of significance was assessed.

FINDINGS OF THE STUDY:

Assessment of Quality Of Life among obese children with selected demographic variables among Obese children, regarding Standard of education ,4 (12.12%) were 7th standard ,12 (36.36%) were 8th standard .According to the Gender 21(63.63%) were female and 12(36.36%) were male. Allocation of the educational status of obese children's father,17(52%) were primary school, and 2(6.06%) were graduates. According to the occupation of father 2(6.06%) were Government employees and 16 (48.48%) coolies workers. According to the educational status of mother 3(9.09%) were illiterate and 1s6(48.48%) were primary school. Dispersion of the obese children's family income per Month,7(21.21%) were receiving less than Rs.2000 per month and 15(45.45%) were receiving Rs.5001 to Rs.10000 per month. Scattering of obese children's family pattern,

were others. According to the likeness of junk foods 25(75.75%) children like junk foods and 8(24.24%) children doesn't like junk foods. According to the place of getting junk foods, 16 (48.48%) were getting from home, 5 (15.15%) were getting form school canteen. According to the time of taking junk foods 22(66.66%) were having while watching TV, and none of them were having during lunch time. Allocation of obese children according to the dietary pattern 18(54.54%) were vegetarian and 15(45.45%) were non vegetarian. Regarding medical illness 4(12.12%) were having medical illness and 29(87.87%) were not having any medical illness.

The first objective was to assess the prevalence of obese children. Represents the prevalence of obesity among children .Samples were collected from L.M.S Higher secondary school and St. Joseph's Higher Secondary School thirithuvapuram. The total Number of student in L.M.S Higher Secondary School were 154.Out of 154 20 children were found obese .In St. Josph's Higher Secondary School total Number of student 128. Out of 128 children 13 (10%) were found as obese .The prevalence of obesity among children was 12.17%.All the obese children 33(12.17%) were selected for the study as a sample.

Second Objective was to assess the Quality Of Life obese children Represents Quality Of Life among obese children in this no one was very satisfied, 5(15.15%) were Moderately satisfied , 20(60%) were slightly dissatisfied 7(22%,) were moderately dissatisfied . 1(3.03%) very dissatisfied. Represents Quality Of Life among obese children on heath aspect , no one were very satisfied , 2(6.06%) Were Moderately satisfied, 18 (54.54%) Were slightly dissatisfied, 9 (27.27%) Were moderately dissatisfied . 4(12.12%) Were dissatisfied. Represents Quality Of Life among obese children on family relationship no one were very satisfied . 10(30%) were moderately satisfied, 16 (48.48%) Were slightly dissatisfied, 7(21.22%) Were moderately

Third objective the quality of life among obese children was assessed. Dietary pattern the calculated vale of grater then table value which indicates there is a significant association between quality of life among obese children with the selected demographic variables such as standard of education, Gender, educational status of father, occupation of father, educational status of mother, family income per month, type of family, area of residence, pocket money per month, religion, do you like junk food, where do you get junk foods, when do you take junk foods, which type of diet you prefer the most, and do you have any medical illness.

CONCLUSION:

The aim of the study were Assess the quality of life among obese children in Selected schools at KanyaKumari district. A descriptive design was conducted to assess the Quality Of Life among obese children 33 samples were selected adopted from L.M.S Higher Second school Neyyoor and St. Joseph's Higher Secondary School, Thirithuvapuram to assess the Quality Of Life among obese children purposive sampling technique was used to selected the sample.

Assess the prevalence of obese children. Represents the prevalence of obesity among children .Samples were collected from L.M.S Higher secondary school and St. Joseph's Higher Secondary School Thirithuvapuram. The total Number of student in L.M.S Higher Secondary School were 154.Out of 154 20 children were found obese .In St. Josph's Higher Secondary School total Number of student 128. Out of 128 children 13 (10%) were found as obese .The prevalence of obesity among children was 12.17%.All the obese children 33(12.17%) were selected for the study as a sample.

Quality Of Life obese children Represents Quality Of Life among obese children in this no one was very satisfied, 5(15.15%) were Moderately satisfied ,

no one were very satisfied . 10(30%) were moderately satisfied, 16 (48.48%) Were slightly dissatisfied, 7(21.22%) Were moderately dissatisfied .no one were dissatisfied. Represents Quality Of Life among obese children on psycho social aspect, in this no one was very satisfied, 6(18.18%) were Moderately satisfied , 17(51.51%) were slightly dissatisfied 9(27.27%,) were moderately dissatisfied . 1(3.03%) were Satisfied.

Third objective the quality of life among obese children was assessed. Dietary pattern the calculated vale of grater then table value which indicates there is a significant association between quality of life among obese children with the selected demographic variables such as standard of education, Gender, educational status of father, occupation of father, educational status of mother, family income per month, type of family, area of residence, pocket money per month, religion, do you like junk food, where do you get junk foods, when do you take junk foods, which type of diet you prefer the most, and do you have any medical illness. Hence Hypothesis (H_1) was accepted

As per the study the researcher concludes that there was an association between obese children and the quality of life

Nursing Implication

The research has derived the following implications from the study results which are vital concern to the field of nursing administration, nursing education and nursing researches.

Nursing service

- The findings of the study suggest that nurses should increase their knowledge on early identification and management of childhood obesity among school

- The study emphasizes that parent, teachers and health care members should be taught about prevention of childhood obesity in school children.

Nursing administration

- This study suggests that nurse administrators should conduct in service education for the nursing staff regarding childhood obesity and its prevention measures.
- These findings will help the administrator to implement health education programmed on prevention of childhood obesity during school health emphasize the nurse administrator to conduct various mass awareness programmers focusing on childhood obesity.

Nursing education

- The study enhances the nursing curriculum to learn about childhood obesity causes, co-morbidity.
- Treatment and its prevention .Extensive use of mass media propaganda can help in the prevention of childhood obesity in the country.

Nursing research

- Adhere is prevalence of childhood obesity throughout the country, more research need to the conducted in the school children in various aspects.
- The association between various aspects. The association between various other determinants and childhood obesity can be explored.
- The study can be published in journals to disseminated knowledge regarding prevention of childhood obesity among school children.

- A similar study can be done in all schools of both urban and rural area.
- A similar study can be done in all age groups of children.
- A similar study can be done on obese children by using a structured teaching programmer in school and community setting.
- A similar study can be done as a experimental study on obese children.

1.BOOKS

1.Ball j.w.& Binder ,R.C(2009). Pediatric Nursing caring of children (4th ed) New delhi: darlingkindersleg (india) pvt .ltd.

2.Bowden V.R &Greenberg,c.s(2010). Children and their families. The continuum of care.(2nd)Philadelphia: Lippincott Williams & Wilkins.

3.Basavanthappa , B(2007). Nursing research .(2nd ed) New delhi: Jaypee brothers Medical publishers.

4. Davis , J.R &Slerer,K.(1998) Applied Nutrition and diet therapy for Nurses,(2nd). Philadelphia: W. B. Saander's company.

5.DR. Swaminathan (2006) M.food and nutrition (6th edn) Published.

6.Dutta ,P(2009) Pediatric Nursing (2 nd edn) New Delhi:Jaypee Brothers Medical publishers.

7.George .JB(2011) Nursing Theories, New Delhi Person Publications

8.Gupta ,P(2007). Essential Pediatric Nursing ,(2nd edn) New Delhi:CBSPubishers and distributors.

9.Hungler,P&Polit, (1995) .Nursing Research Principles and Methods (5th edn) Philadelphia:.J.B Lippincott Company.

10. Kliegman , R. Metal (2008) Nelson Text book of paediatrics (18th edn) Philadelphia: Saunders AnImprient of Elsevier.

11.MaharajanB.K(2006) .Methods of Biostatistics (6th edn) New Deihi : Jaypee Brothers Medical Publishers .

14.Potts , N.L&Mandiew,B.L(2007).Pediatric Nursing Caring for Children and their families, (2nd edn) Australia: Thomson Delmer Learning.

15.Priyush Gupta (2004) ."Essential PeddiatricNUursing" (1st edn) , New Delhi A.P . Jain and Co Publications.

16.Wong .L.Donna (2005) "Nursing Care of Infants And Children ,(7th edn) Missowri Mosby Publications.

2.JOURNALS:

1. Ben –sefe,E.et.al (2009).childhood obesity current literature,policy and implications for practice international nursing review.56(1) 166-74
2. Balaji.A Quality of care among obesityin urban slum of Chennai .Journal of Indian Medicine,2011 July :19(7) 462 -4 223/5835.
3. Bharathi (2008). Correlates of overweight and obesity among school going children of wordha city. Indian Journal Of Medical Research 58(8) 539-543.
4. Chandrasekhar , T .(2007).obesity . nisargopachervarta 11(6) 5-7 ,17
5. Hering ,Eet al (2009) obesity in children is associated with increased health care use. clinical paediatrics 48(8) 812-817
6. Kamatche (2010) . determination of obesity among school children .The nurses 2(2) 14- 16
7. Kaur, S saini S.K (2008). Role of Nurse in Assessment And Prevention of obesity. Indian Journal of continuing Nursing Education 9(1) 16-18
8. Lisa . R. Pawloski et al (2011) .the growing burden of obesity in Thailand.pediatric Nursing 37(5) 256-260.
9. Small ,l et al(2007). Prevention and early treatment of overweight and obesity in young children . A critical review and appraisal of the evidence pediatric nursing 33(2) 149-161
10. Jaylor ,J(2006) practice nurse vital to tackling obesity : nursing times 102 36(7).
11. Jaylor ,J(2006) child obesity study in danger ,nursing times 102 (34) 22-23

3. ELECTRONIC REFERENCES:

1.crawford ,D . et al(2005). Parentral concerns about childhood obesity in melburne ; Australia .Retrieved from http: // www. Ncbi.nih.gov.

2.Cunninghani ,A .(2006).Indian Sounds alarm on rise in obesity case Retrieved from http://www.npr.org.

3. Childhood obesity .the global picture http://www.iotf.org/childhood obesity .asp.

4. Centers for disease control (CDC) .The global school and health survey background ; CDC : Atlanta GA,USA (2009);background /index (assessed on 25 august (2011)).

5.Dencker , M et al (2006) relationship of physical activity on body fat in children in Sweden . Retrieved fromhttp://www.ncbi.nih.gov.

6. FerryR(2008).Obesity in childreRetrieved from http://www.emedicinehealth.com.

7.Ghangan , S.(2003).How parents can fight the obesity epidemic .Retrieved from http://www.med.umich.edu.

8.Hamack L et al (2005) effect of parentraloverweight status in minnesota,USA .Retrieved from http://www.cbi.nib.gov.

9.Kim ,I.K et al (2005) effect of parentral overweight on the manifestation http://www.npr.org.

10.Kumar H.N .et al (2006). Prevalence of overweight and obesity among the preschool children in mangalore India .Retrieved from http://www.ncbi.nih.org.

ANNEXURE I

St. XAVIER'S CATHOLIC COLLEGE OF NURSING

Chunkankadai, Nagercoil,
Kanyakumari District,
Tamil Nadu - 629 003.

Tel : College : 04651 - 231740
Cell : 9840307884
Fax : 04651 - 230914
E-mail : xaviers_nursing@yahoo.com
reenaevancy@yahoo.com
Website : www.xaviersnsg.edu.in

Dr. A. REENA EVENCY, M.Sc. (N)., Ph.D.,
Principal

29/06/2015

To

The Headmistress,

St.Joseph's Higher secondary School,

Thirithuvapuram

Thirithuvapuram Post

K.K Dist.

Respected Madam,

Ms. Anto Lincy is a student of M.Sc. Nursing program in our college from Child Health Nursing Department. She is conducting study on "A study to assess the quality of life among obese children in selected schools at kanyakumari District."

This is for the research project to be submitted to the Dr. M.G.R. Medical University in partial fulfillment of university requirement for the award of M.Sc. Nursing degree and will be beneficial in understanding and improving the health of the obese children in selected school.

As a part of her study she needs to observe the the quality of life among obese children in your school. So permission may kindly be granted to her to conduct the study in your esteemed school. She will abide by the rules and regulations of your school.

Thanking you.

Yours faithfully,

PRINCIPAL
ST. XAVIER'S CATHOLIC COLLEGE OF NURSING
CHUNKANKADAI
NAGERCOIL - 629 003
K. K. DIST.

St. XAVIER'S CATHOLIC COLLEGE OF NURSING

Chunkankadai, Nagercoil,
Kanyakumari District,
Tamil Nadu - 629 003.

Tel : College : 04651 - 231740
Cell : 9840307884
Fax : 04651 - 230914
E-mail : xaviers_nursing@yahoo.com
reenaevancy@yahoo.com
Website : www.xaviersnsg.edu.in

Dr. A. REENA EVENCY, M.Sc. (N)., Ph.D.,
Principal

29/06/2015

To

The Headmistress,
L.M.S Higher secondary School,
Neyyoor
Neyyoor (p.o),
K.K Dist.

Respected Madam,

Ms. Anto Lincy is a student of M.Sc. Nursing program in our college from Child Health Nursing Department. She is conducting study on "A study to assess the quality of life among obese children in selected schools at kanyakumari District."

This is for the research project to be submitted to the Dr. M.G.R. Medical University in partial fulfillment of university requirement for the award of M.Sc. Nursing degree and will be beneficial in understanding and improving the health of the obese children in selected school.

As a part of her study she needs to observe the the quality of life among obese children in your school. So permission may kindly be granted to her to conduct the study in your esteemed school. She will abide by the rules and regulations of your school.

Thanking you.

Yours faithfully,

PRINCIPAL
ST. XAVIER'S CATHOLIC COLLEGE OF NURSING
CHUNKANKADAI
NAGERCOIL - 629 003
K. K. DIST.

ANNEXURE II

Phone : 04651- 222250

L.M.S. HIGHER SECONDARY SCHOOL FOR GIRLS

NEYYOOR - 629 802

KANYAKUMARI DISTRICT, TAMIL NADU, SOUTH INDIA.

From

Tmt. **D. VANAJA NALINA KUMARI,** M.Sc., M.Ed.,M.Phil.

HEADMISTRESS

L.M.S.H.S.School for Girls

Neyyoor P.O.

To

Letter No. .....

Date : 31.7.15

To

The Principal,

St.Xavier's Catholic College of Nursing,

Chunkankadai,

Nagercoil.

Respected Madam,

This is to certify that S.Anto Lincy, M.Sc (N) student of St.Xavier's catholic college of Nursing, Nagercoil has conducted a study to assess the Quality of life among obesity children of L.M.S girls Higher Secondary school , Neyyoor for 15 days from 16/07/2015 to 31/07/2015. She has successfully completed the data collection.

31/7/15

L.M.S. HIGHER SECONDARY SCHOOL FOR GIRLS

NEYYOOR - 629 802

ANNEXURES III

St. XAVIER'S CATHOLIC COLLEGE OF NURSING

Chunkankadai, Nagercoil,
Kanyakumari District,
Tamilnadu - 629 003.

Tel: College : 04651 - 231740
Cell : 9840307884
Fax : 04651 - 230914
E-mail : xaviers_ nursing@yahoo.com
Website : www. xaviersnsg.edu.in

	Approved by Govt. of Tamilnadu	Approved by INC, New Delhi	Registered under T.N. Nursing Council	Affiliated to the T.N. Dr. M.G.R. Medi. Uni., Chennai
B.Sc. (N)	G.O. (Ms) No. 178/2006	18-29/3011-INC/2006	Ref. No. 34/NC/2006	Affln. II(1)/32947/06
PB.B.Sc(N)	G.O. (Ms) No. 376/2008	18-29/4288-INC/2010	Ref. No. 7419/NC/2009	Affln. II(3)/2472/09
M.Sc (N)	-	18-29/7573-INC/2011	Ref. No. 4478/NC/2011	Affln. II(3)/37281/10

To

Respected Sir/ Madam,

Sub: Requisition to expert opinion and suggestion for the content validity.

I Anto Lincy,, M.Sc. Nursing II year student of St.Xavier's Catholic College Of Nursing, Chunkankadai, have selected the following topic, **"A Descriptive study to assess the quality of life among obese children in selected schools at Kanayakumari District"** for my dissertation to be submitted to The Tamil Nadu Dr. M.G.R. Medical University in the partial fulfilment of the requirement for award of Master of Science in Nursing.

I request you to go through the items and give your valuable suggestions and opinions to develop the content validity of the tool. Kindly suggest modifications, addition and deletions if any in the remarks column.

Thanking You,

Place: Chunkankadai
Date: 25.05.2015

Yours sincerely,

for 25/5/15

ENLOSURE:

1. Problem statement, objectives, and hypotheses of the study.
2. Demographic profile.
3. WHOQOL Scale.
4. Evaluation Performa.

PRINCIPAL
ST. XAVIER'S CATHOLIC COLLEGE OF NURSING
CHUNKANKADAI
NAGERCOIL - 629 003
K. K. DIST.

LETTER SEEKING EXPERTS OPINION FOR THE VALIDITY OF THE TOOL

From,

Ms. S.Anto Lincy ,
M.Sc. Nursing II year,
St. Xavier's Catholic college Of Nursing,
Chunkankadai.

To,

Respected Sir/ Madam,

Sub: Requisition to expert opinion and suggestion for the content validity.

I Ms s.Anto Lincy ,M.Sc. Nursing II year student of St.Xavier's Catholic College Of Nursing, Chunkankadai, have selected the following topic, **"A Descriptive study to assess the Quality Of Life among obese children in selected schools at Kanayakumari District"** for my dissertation to be submitted to The Tamilnadu Dr. M.G.R. Medical University in the partial fulfilment of the requirement for award of Master of science in Nursing.

I request you to go through the items and give your valuable suggestions and opinions to develop the content validity of the tool. Kindly suggest modifications, addition and deletions if any in the remarks column.

Thanking You,

Place: Chunkankadai Yours sincerely,

Date :Mr.S.Anto Lincy.S .

ENLOSURE:

1. Problem statement, objectives, and hypotheses of the study.
2. Demographic profile.
3. Modified WHO Quality Of Life Tool.
4. Evaluation Performa.

ANNEXURES IV

EVALUATION CRITERIA CHECKLIST FOR VALIDATION

Instructions:

The expert is requested to go through the following criteria for evaluation. Three columns are given for responses and a column for remarks. Kindly please tick mark (✓) in the appropriate columns and give remarks. Interpretation column:

Column I – meets the criteria.

Column II - Partially meets the criteria.

Column III – does not meet the criteria.

S.NO	CRITERIA	1	2	3	REMARKS
1	Scoring -adequacy. -clarity. -simplicity.				
2	Content -logical sequence. -adequacy. -relevance.				
3	Language -Appropriate. -clarity. -simplicity.				
4	Practicability -easy to score. -precise. -utility.				

Signature: Any other suggestion:

Name:

Designation:

Address:

CRITERIA CHECK LIST FOR VALIDATION OF THE TOOL

Instruction:

Kindly give your suggestions regarding the accuracy, relevance and appropriateness of the content. Kindly (✓) against specific columns.

PART-I

VALIDATION OF DEMOGRAPHIC VARIABLES

Item	Very relevant	Relevant	Need for modification	Not relevant	Remarks
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

PART-II

Validation of Modified WHO Quality Of Life Scale .

Item	Very Satisfied	Moderately satisfied	Slightly dissatisfied	Moderately dissatisfied	Very dissatisfied

ANNEXURE V

LIST OF EXPERTS VALIDATED THE TOOL

1. Dr..Suthaponna
   Medical Director,
   Agasthyarmuni child centre
   Vellamadam,
   KanyaKumari District,

2. Dr. SashyaJayaharan , M.D,DCH,PGDAP,
   Consultant paediatrician,
   Dr.Jayaharan Memorial Hospital,
   Nagercoil – 629 001.

3.Mrs. MalghijaM.Sc (N)

   Professor
   Christian College of Nursing
   Neyyoor

5. Mrs.Premalatha M.sc (N)

   Associate Professor

   Christian College of Nursing

6. Mrs. SaraipriyaPh.D
   Principal
   P.S College of nursing
   Thalakulam
   .

ANNEXURE VI

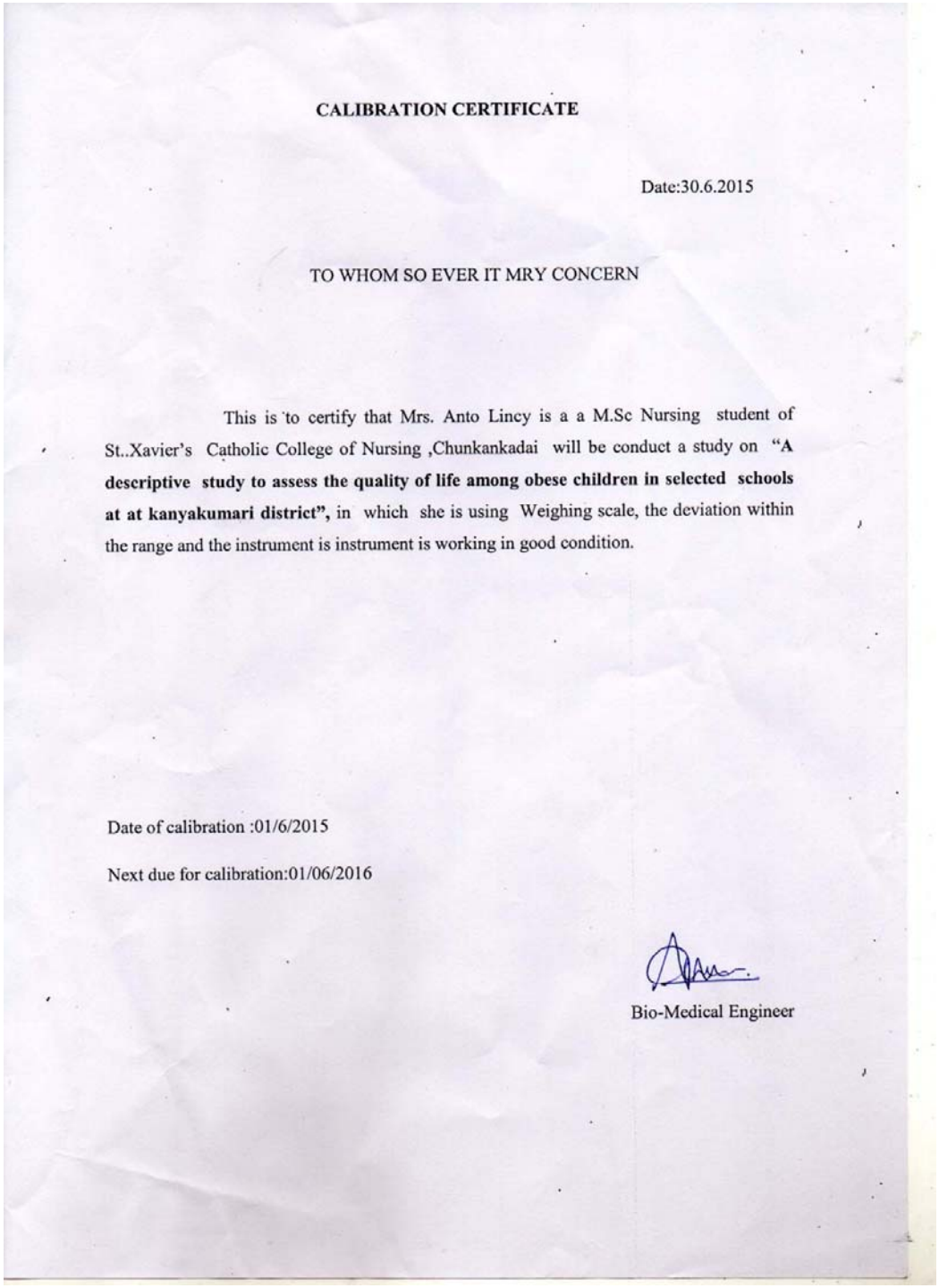
CERFIFICATE OF EDITING

Certified the dissertation paper titled "A Descriptive study to assess the Quality Of Life among obese children in Selected school at kanyakumari district" by S.Anto Lincy has been Checked for accuracy and correctness of English language usage and that the language in the tool is lucid, unambiguous,free of grammatical and spelling errors and apt for the purpose.

Principal
K,M.P. NATIONAL NURSERY AND
PRIMARY SCHOOL,
Thingal Nagar, Neyyoor P.O.

ANNEXURE VII

CALIBRATION CERTIFICATE



CALIBRATION CERTIFICATE

Date:30.6.2015

TO WHOM SO EVER IT MRY CONCERN

This is to certify that Mrs. Anto Lincy is a a M.Sc Nursing student of St..Xavier's Catholic College of Nursing ,Chunkankadai will be conduct a study on **"A descriptive study to assess the quality of life among obese children in selected schools at at kanyakumari district",** in which she is using Weighing scale, the deviation within the range and the instrument is instrument is working in good condition.

Date of calibration :01/6/2015

Next due for calibration:01/06/2016

Bio-Medical Engineer

ANNEXURE VIII

CERTIFICATE OF STATISTICAL ANALYSIS AND INTERPRETATION OF DATA

CERTIFICATE OF STATISTICAL ANALYSIS

TO WHOM SO EVER IT MAY CONCERN

Certified the dissertation paper titled "**A descriptive study to assess the quality of life among obese children in** selected school at **Kanyakumari district**" done by Mrs. Anto Lincy.S has been checked for the accuracy in statistical analysis and interpretation and was appropriate for the purpose.

5/2/16

Signature

Dr. G. IMMANUEL, Ph.D.
Assistant Professor
Centre for Marine Sciences & Technology
Manonmaniam Sundaranar University
Rajakkamangalam-629 502
K.K. District, South India

ANNEXURE IX
TOOL FOR DATA COLLECTION

PART-I

DEMOGRAPHIC VARIABLES

Instructions

The investigator will ask the item listed below and place the tick mark (✓) against the response given by the respondents.

1.Standard of education

a) 6^{th}
b) 7^{th}
c) 8^{th}
d) 9^{th}

2.Gender

a) Male
b) Fe male

3.Educational Status Of Father

a) Illiterate
b) Primary
c) Higher secondary
d) Graduate and above

4.Occupation Of Father

a) Self employee
b) Private employee

5.Educationalstatus of mother

a) Illiterate
b) Primary
c) Higher Secondary

6.Family income per month

a) Less than 2000
b) Rs.2001-5000
c) Rs.5001-10000

7.Type Of Family

a) Nuclear family
b) Joint family
c) Extended family

8.Area of Residence

a) Semi urban
b) Rural

9.Pocket of money per month
a) No pocket money
b) Rs.1-100
c) Rs.101-200
d) Rs. above 200

10.Religion

a) Hindu
b) Christian
c) Muslim
d) Other

11. Likenessjunk foods
a) Yes
b) No
12.Place of taking junk foods

a) From home
b) School canteen
c) Fast food corner
d) Play ground

13. Time taking junk foods
a) While watching T.V
b) Participating in parties
c) In the coffee shop
d) During lunch

14.Dietary pattern
a) Vegetarian
b) Non vegetarian

15. Medical illness
a) Yes
b) No

SCORE OF QUATELET SCALE

Weight category	BMI Range
Under weight	<18.5
Health weight	18.5-24.9
Over weight	25.0-29.9
Obese	30.0-39.9

PART IIMODIFIED WHO QUALITY OF LIFE SCALE

S .No	Quality Of Life Scale	ssatisfied Very	ed Moderately	isfiedSlightly	ed Moderately	Very satisfied)
1	Your health ?					
2	Your health care ?					
3	Having no pain ?					
4	Having enough energy everyday ?					
5	Taking care of yourself without help?					
6	Having control over your life ?					
7	Living as long as you would like ?					
8	Your family's health?					
9	Your family's happiness?					
10	The emotional support you get from your family ?					
11	Being useful to others ?					
12	Having no worries ?					
13	Your neighborhood ?					
14	Your home apartment or place where you live ?					
15	Your study ?					
16	Doing things for fun ?					
17	Having a happy future ?					
18	Peace of mind ?					
19	You faith in god ?					
20	Achieving your personal goals ?					
21	Your happiness in general ?					
22	Being satisfied with life ?					
23	Your personal appearance ?					
24	Are you to your self ?					
25	You have any difficulties with sleeping?					

SCORING WHO QUALITY OF LIFE SCALE

Score	Quality of Life scale
0-20	Very dissatisfied
21- 40	Moderately dissatisfied
41-60	Slight dissatisfied
61-80	Moderately satisfied
81-100	Very satisfied

ANNEXURE X

FORMULAS USED FOR DATA ANALYSIS

DESCRIPTIVE STATISTICS

Mean $$\acute{x}=\frac{\sum x}{N}$$

Standard deviation $$s=\sqrt{\frac{\sum\left(x-\acute{x}\right)^2}{n-1}}$$

Chi-Square test $$x^2=\sum\frac{\left(o-e\right)^2}{e}$$

ANNEXURES XI

OBESITY CHILDREN

INTRODUCATION

A child is considered to be obese when he or she has a body mass index in the 95th percentile. This means that the child weighs more than 95 percent of other children of the same age and sex. Obesity puts children at a higher risk for developing certain medical problems later in life. Extra pounds can also lead to poor self-esteem and depression. This program discusses the causes and symptoms of childhood obesity. The complications and risk factors associated with the condition are also included. A section about healthy lifestyle changes provides tips for preventing childhood obesity. Obesity in children is a serious medical condition. A child is considered obese when he or she is above the normal weight for his or her age and height. Childhood obesity puts children at risk for health problems like high cholesterol, high blood pressure, and diabetes. These problems were once limited to adults. Today, children have easy access to unhealthy foods. Fast food, candy, and soda pop are readily available to children. Children also engage in more low-level activities than children of the past, like watching TV or playing video games. Choosing these activities over activities that are more physically demanding, such as sports, puts children at risk for serious health problems. Many physical problems are linked to childhood obesity.

DEFINITION OFOBESITY

Overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health. A crude population measure of obesity is the body mass index (BMI), a person's weight (in kilograms) divided by the square of his or her height (in metres). A person with a BMI of 30 or more is generally considered obese. A person with a BMI equal to or more than 25 is considered overweight

CAUSES OF OBESITY

There are several possible causes of childhood obesity, which include:

- Genetic causes

- Hormonal causes

- Lifestyle issues

Certain genetic diseases and hormonal disorders can cause childhood obesity. Prader-Willi syndrome and Cushing's syndrome are two diseases that are linked to childhood obesity. However, these conditions are not common. More often than not, childhood obesity is related to lifestyle issues. Eating too much and exercising too little are the major causes of obesity in children.

RISK FACTORS

There are many factors that can increase your child's risk for becoming overweight. These are known as risk factors. The following section reviews the most common risk factors associated with childhood obesity. If child regularly eats foods that are high in calories, they are at risk for gaining weight. High calorie foods include baked goods, fast food, and snacks from vending machines. These foods have extra sugar, fat, and calories. If your child does not exercise regularly, he or she is more likely to gain extra weight. Exerciseburns calories through physical activity. Watching television, playing videogames, and surfing the internet are sedentary activities. Children who regularly engage in these activities are at risk for childhood obesity. Family eatinghabits can affect child's weight. Buying foods that are convenient instead of healthy puts your child at risk for obesity. Cookies, frozen pizzas, and chips are high-calorie items. A family history of obesity is another risk factor. Children who come from a family of overweight people are more likely to be overweight. Certain psychological factors can put children at risk for childhood obesity. Children may cope with emotional problems like stress or boredom by eating. These tendencies usually run in the family. Socioeconomic factors have also been linked to childhood obesity. Children who come from low-income backgrounds are more likely to be diagnosed with childhood obesity. Eating healthy and exercising takes time, energy, and resources that some families do not have.

SINGESYMPTOM

Not every child who has extra pounds is overweight or obese. Some children may have larger body frames than an average child. Children also have different amounts of body fat during different stages of their development. child'shealthcare provider can help determine if child's weight puts him or her at risk for health

problems. This is done by calculating child's body mass index, or BMI. BMI indicates whether child is overweight for his or her age and height. child's healthcare provider can then use a growth chart to determine how child compares with other children of the same age and sex. For example, a child with a BMI at the 85th percentile weighs more than 85 percent of other children of the same age and sex. Typically, a child with a BMI between the 85th and 94th percentiles is considered overweight. A child with a BMI at or above the 95th percentile is considered obese. BMI does not consider things like being muscular. It does not account for larger than average body frames or growth patterns that may vary among children. Your child's healthcare provider will consider these factors when determining whether your child's weight is a cause for concern. If you are worried about your child's weight, talk to his or her healthcare provider. Your child's healthcare provider can look at a number of different factors, including your family's weight-for-height history. This will help determine if your child's weight is a cause for concern.

Effects on health

- Breathing problems, including asthma
- High blood pressure
- High cholesterol
- Metabolic syndrome
- Sleep disorders
- Type 2 diabetes

Social and emotional problems are also linked to childhood obesity. They include:

- Behaviour problems
- Depression
- Learning problems

- Low self-esteem

Childhood obesity can be successfully prevented or treated by making certain lifestyle changes. Improving a child's diet and exercise habits can improve the health of your child now and in the future.

DIAGNOSIS

child's healthcare provider can help you determine if child's weight is a cause for concern. The healthcare provider will start by checking child's body mass index, or BMI. This indicates child is overweight for his or her age and height. In addition to evaluating child's BMI, the healthcare provider will evaluate your family history of obesity and weight-related problems. The healthcare provider will also evaluate your child's:

- Activity level
- Diet and eating habits
- Preexisting health conditions

During this time, the healthcare provider will also review your child's physical development and check his or her heart, lungs, blood pressure, and other vital signs. If the healthcare provider believes your child is obese, he or she may order blood tests, including:

- Blood sugar test
- Cholesterol test
- Other tests to check for hormone imbalances

Some tests require your child to fast for up to eight hours before a test. Fasting means that your child cannot eat or drink anything. The healthcare provider will let you know if your child needs to fast before a blood test.

THEATMENT

Treatment for childhood obesity depends on your child's age and if he or she has other medical conditions. Treatment often includes lifestyle changes. This may include changes to your child's diet and level of physical activity. Sometimes obesity in children will be treated with medications or weight-loss surgery. However, this is not common. Treatment for children under age 7 usually involves weight maintenance, not weight loss. This allows the child to maintain his or her current weight while adding inches in height. Over time, this causes the child's BMI to drop into a healthier range. If there are health concerns, the doctor may recommend weight loss. For children 7 years of age or older, weight loss is usually recommended. Weight loss should be slow and steady. Recommended weight loss is 1 pound per week or per month depending on the child's condition. Sometimes obesity is treated with weight-loss medication. Some children over the age of 12 may be prescribed medication that prevents fat from being absorbed in the intestines. However, prescription weight-loss medication is usually not recommended for children. Children with high cholesterol will sometimes be treated with a statin medication. These medications help lower cholesterol, but their long-term side effects are unknown. Talk to your healthcare provider about the possible risks. Weight-loss surgery is sometimes an option for obese children of a certain age. Surgery of any kind comes with potential risks and complications. Your child's healthcare provider may choose to treat obesity with surgery if your child's weight poses a larger threat than the risks of surgery. Medication and surgery can provide relief from symptoms and conditions related to obesity. However, there is no replacement for healthy eating and being physically active. Encouraging healthy habits at home is essential to your child's well-being

Pharmacologic therapy

Few drugs are available for the treatment of obesity, and their effectiveness is limited to palliation (ie, production and maintenance of weight loss) rather than cure, with benefits fading when the drugs are stopped. Because all medications inherently have more risks than diet and exercise do, pharmacologic therapy should be used only in patients in whom the benefit justifies the risk.[79]

Surgery treatment

In patients with morbid obesity associated with comorbidities, bariatric surgery is the only available therapeutic modality associated with clinically significant and relatively sustained weight loss. Well-performed bariatric surgery, in carefully selected patients and with a good multidisciplinary support team, substantially ameliorates the morbidities associated with severe obesity

PREVANTION OF OBESITY IN CHILDREN

You can have a major impact on your child's health by making some small changes. This section reviews 10 tips for promoting healthy eating habits at home.

1. Avoid convenient foods. Cookies, potato chips, and prepared meals are high in fat and sugar. Instead, keep healthy snacks around the house. Fruits and vegetables make excellent snacks.

2. Do not use food as a reward or a punishment. It sends the wrong message about the purpose of food. Teach your child that healthy food is something the body needs. It is the fuel that keeps your child's engine running.

3. Limit the amount of sweetened drinks in your house. Sugary beverages like soda pop and juice that is not 100% fruit juice provide very little nutritional value and they are high in calories. A child who fills up on these drinks may not be hungry for healthier foods later in the day.

4. Turn off the TV or computer and sit down to eat as a family during meal time. Eating in front of the TV causes people to eat slower and for a longer period of time, which is not a healthy way to take in calories.

5. Limit the amount of food you eat outside of the home. This includes the number of times you eat at restaurants. The menu items at restaurants and fast food chains are often high in fat and calories.

6. Encourage the child to be physically active and play sports or do chores. Any physical activity counts. This will burn the extra fat and build strong muscles and bones.

7. Limit the amount of recreational screen time your child gets to no more than 2 hours each day. This includes TV, movies, videogames, Internet surfing, and social networking sites. Also limit the amount of time your child gets to use the phone.

8. Do not allow your child to eat while he or she is engaged in activities that are not physically demanding. If you allow your child to have snacks while playing videogames or watching TV, your child will be unaware of how much he or she is eating.

9. Do not force your child into a structured exercise program. The goal is for your child to want to be physically active, so activities have to be fun. Games like tag, hide-and-seek, or jump-rope are great ways to burn calories, improve fitness, and have fun.

10. Take part in fun family activities. This prevents exercise from looking like a punishment or a chore. If you're excited about an activity, your child will be too.

WAY TO IMPROVE QUALITY OF LIFE

More active emotions:

The moments and extended periods we have of different positive moods, perspectives, or sensations, including feelings of happiness, gratitude, closeness, confidence, peace, hope, and awe-inspired.

Engagement:

Periods of time when we are so caught up in the moment or activity we're working on that we have a clarity of focus, time seems less relevant, and we are risen to our best with all of our best being used. This is frequently associated with 'Eustress', which is the positive opposite to distress.

Relationships:

The quality of our relationships with others is very highly interwoven with our overall quality of life. The strength of our social support structure or 'Personal Safety Net' [2] is fundamental to many our coping skills. Resiliency when facing challenges in our lives often stems from past or present interactions. Our relationships may be a source of many of the other aspects of quality of life, especially positive emotions. There are a select few who thrive more abundantly in solitude or with the company of an animal. Often the relationship these people need is one with themselves. This is out of the norm and can happen for a number of reasons so do not be discouraged if this sounds familiar.

Meaning:

How well our work and other endeavors connect with our ideas of fulfilling a "greater purpose," contribute enormously to our self esteem and confidence to continue our efforts. The opposite is a feeling that we are wasting our time on trivial tasks that do not contribute to a greater cause. A sense of meaning is often easier to come by if what we do connects with addressing the needs of a community we care about.

Accomplishment: A sense of accomplishment is closely tied to how well we feel we are able to complete our "to do" lists. But it can also include the simple positive emotion that comes from completing an already-solved problem like a sudoku puzzle, or level of a video game. [3]

Health: Not referenced in the original list, but worth including here, is the quality of our physical well-being, including how much pain we're in, how much mobility we have, and how much we can do physically. According to Gallups' research on global well being, the quality of our sleep plays a critical role in overall quality of life - if we aren't getting enough good rest, we are far more likely to be emotionally overwhelmed or otherwise less productive.

Accept challenge as a natural part of life:

No amount of positive thinking will take a challenge away but there are positive ways to see our challenges. Our painful emotions cannot defeat us. We do not need to rid ourselves of negative emotions and nor do we need to over attached to them. All painful emotions will come and go through the natural process of life. If we have a bad mood, we don't need fight it with trying to think positive. Accept the mood

and trust that it will pass. Trust that each challenge is here to help you grow and do your best to live effectively when challenged.

Self -reliant:

It is when we are self-centered that we are apt to become the most negative towards ourselves and others. When we see life as all about us it is easy to believe that we deserve more than what we have. An attitude of entitlement sets us up for unrealistic expectations that others should cater to all our needs and wants. This type of attitude makes us dependent. The surest way to a happier life is to be able to depend upon ourselves to get our needs met. Dependency is a vain state of existence which creates us be an "energy sucker" for others.

See life as full of opportunity:

When we see life in terms of lack or what we do not have we cannot appreciate the beautiful nuances our life brings. Learning to see and appreciate all that we do have makes us grateful. Grateful people see the good while negative people complain. There is nothing more draining for others than to be around someone who constantly complains about life. Learn to see everything as opportunity. Shift from selfishness into gratefulness. This attitude gets noticed by others, it makes yus more attractive, and from this, more possibilities open up. People that don't appreciate the nuances of their lives live in a constant state of suffering.

Rid yourself of "seriousity":

Laugh more, especially at yourself. Choose not to sweat the small stuff. Life gets busy, schedules are booked, we have the responsibility of relationships, and work can become task oriented or routine-driven at times. When we stop laughing and become mechanical life is lived under a black cloud. Life isn't always about performance. There is so much more out there. Break your routine, take breaks, go on vacation or have a staycation but learn to see out of your "responsibility" box and laugh, smile and become alive.

Help others:

Negativity and selfishness go hand-in-hand. People that live as if they are at the center of the Universe struggle to find the higher purpose in their lives. If the whole point of this life is only for someone to take care of themselves and no one else, the road to long-term happiness and purpose will not be reached. Helping others, loving others, and supporting others to be a happier or a more successful version of who they are is a pathway to increased fulfillment for us.

Have a purpose:

Goals, achieving and striving for something bigger is a sure path to happier life. Happiness is the byproduct of achieving. We are all here to work and to be in action. Without action there is nothing but room for depression and negativity. As we stay busy, moving towards a goal, being creative and innovative, we wake up with a purpose. Inspiration keeps us motivated and active in our lives. Find that purpose that is uniquely yours and don't wait one more minute to start your journey.

Choose your attitude:

Change always starts from within. In life we can either be our best ally or our worst enemy. Learning to see the good in painful is the greatest asset we have to feeling and being successful. Life is never going to be without challenge, but we can still choose to search for the silver lining when we feel life's pain. Change the language you speak to yourself. We are the hardest on ourselves, and a stream of negative, self-defeating inner talk is corrosive to a happy life. Be nice to yourself.

Choose good company: Emotions are contagious and for that reason we become the most like the people we spend our time with. If our friends and/or family groups are full of emotional-vampires, histrionics or self-centered people we will unconsciously become like them. It is difficult to become happier and more fulfilled in life when the people around us are not supportive or demonstrative of positive behavior. Finding positive, motivated people is like riding an escalator into life's more fruitful spaces.

Work hard:

Learn to turn stress into positive action/motivation. Work through the stress instead of letting it paralyze your movement. All stress can be worked through, and when we focus on working through it the stress dissipates much more quickly. Further, hard work is always geared towards the achievement of something and happiness is the byproduct of achieving. Working hard and fulfillment are synonymous. Laziness and depression are also synonymous.

No more victim mentality:

We cannot grow if we see ourselves as the victim. We are all responsible for our thoughts and our attitude. Take full responsibility for your view point and see the good in the "bad." If we consistently believe bad things are always happening to us we handicap ourselves. Make this new year the year for you to be the victor. We each have unlimited potential within to design our own reality and to change our lives.

Make positive choices in favor of yourself. Love yourself, take action and watch your thoughts. Thoughts become words and words lead the actions, and actions then become habits. Since this is the process give your attention to gratitude, prosperity, abundance, love, hard work, goals, exercise, eating clean, and getting sufficient sleep. Let these becomes your habits.

CONCLUSION

The increased consumption of calorie-dense fast food and sucrose-enriched drinks, together with an increasingly sedentary lifestyle, appear to be major factors contributing to this epidemic. While prevention of obesity should receive high priority, there is emerging evidence that treating obese subjects, particularly those with metabolic syndrome or type 2 diabetes, has short-term effects on the prevention of diabetes; improves glucose, lipid, and blood pressure parameters; and is likely to have beneficial effects on long-term health outcomes. There is evidence that the available antiobesity agents are efficacious and have a favourable impact on parameters associated with cardiovascular outcomes.

ANNEXURES XII

PHOTOGRAPH OF THE STUDY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